

# Greater New Orleans Primary Care Safety Net Access Plan

Prepared by The City of New Orleans Health Department • Fall 2012



# Table of Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>3</b>
<b>Methodology</b> .....	<b>3</b>
<b>Geographical Scope</b> .....	<b>3</b>
<b>Policy Recommendations</b> .....	<b>4</b>
<b>Context and Current State</b> .....	<b>7</b>
Health Systems Changes after Hurricane Katrina.....	8
Current State of New Orleans Health and Healthcare .....	9
Estimating Outpatient Primary Care Service Areas in Greater New Orleans .....	9
Primary Care and Access Stabilization Grant (PCASG) Data .....	9
Federally-Funded Health Center Grantees .....	11
Need Indicators and Gradients Across ZCTAs .....	13
<b>Community Profile</b> .....	<b>14</b>
Demographics .....	14
Employment, Income, and Poverty .....	15
Health Insurance Coverage .....	15
Public Coverage.....	17
Uninsured .....	17
Community Health Status.....	18
Specialty Care Access .....	21
Community Outreach and Awareness .....	21
Health Information Technology .....	21
Workforce.....	23
Summary of General Discussions with Community Members.....	24
Primary Care.....	25
Developing a Community-Based System of Care.....	25
Workforce.....	26
Community Approach to Health .....	27
Forces of Change .....	27
<b>Implications of the Patient Protection and Affordable Care Act (ACA)</b> .....	<b>28</b>
<b>Methods for Financing Safety Net Systems: An Analysis of Existing Models</b> .....	<b>31</b>
<b>Potential Resources to Leverage for Implementation</b> .....	<b>35</b>
New Orleans Health Data Mapper .....	35
<b>Acknowledgements</b> .....	<b>37</b>
Task Force.....	37
<b>Appendix A</b> .....	<b>38</b>
<b>Appendix B</b> .....	<b>40</b>
<b>Appendix C</b> .....	<b>42</b>
<b>Appendix D</b> .....	<b>49</b>

## Executive Summary

In the spring of 2012, as part of the White House Strong Cities Strong Communities initiative (SC2), the City of New Orleans, with assistance from the U.S. Department of Health and Human Services (HHS) and the Robert Graham Center, undertook an effort to understand the current and projected capacity of the primary care safety net in the New Orleans area in order to meet the needs of the population and adapt to anticipated market changes in 2014. The ultimate goal of the New Orleans Health Access Planning project was to develop a comprehensive overview and set of policy recommendations for healthcare access in the New Orleans area for use in planning and policy-making, in order to achieve and maintain equitable access to care.

Dr. Karen DeSalvo, Health Commissioner for the City of New Orleans, co-chaired a collaborative effort with Dr. Anjum Khurshid from the Louisiana Public Health Institute (LPHI). They assembled an advisory group of 15 community members, consisting of leaders from an array of backgrounds including non-profit staff, hospital system executives, government officials, and representatives from the private insurance industry. Quantitative and qualitative data were assembled to create a picture of health and healthcare access for the Greater New Orleans area. Data sources included interviews and discussions with key local stakeholders, analysis of claims and service data, and reporting data from Federally Qualified Health Centers.

In the seven years since Hurricane Katrina in 2005, the primary care safety net in the Greater New Orleans area has grown rapidly. This safety net currently has capacity with a reasonable distribution, and reaches nearly 80% of the low-income population. The care model includes innovations that improve access to primary care and mental health services, increase affordability and create health information technology capability. Although the area has seen a dramatic improvement over its prior dependence on emergency department care, the primary-care safety net is unstable and heavily reliant on public funding – particularly for the care of the uninsured. There are opportunities to enhance the primary care safety net, to create one more resilient for disaster, everyday life, and ready to compete in the 2014 marketplace.

Key findings and areas of focus to strengthen the primary care safety net include the following:

1. *Primary Care Sustainability:* The network of primary care safety net clinics is not financially stable. Therefore, there is the need to build stronger business functionality and expand capacity in order to meet the current and growing demand and to remain competitive in 2014.
2. *Specialty Care:* Low-income patients have long wait times for access to specialty care services, or no access at all. There is a need to develop a more systematic way of using available specialty services efficiently.
3. *Health Information Technology (HIT):* The primary care safety net has a high adoption of HIT but requires continued investments and upgrades in the HIT

infrastructure to enable improved care coordination, to reduce system fragmentation and to improve the public's health.

4. *Coverage and Finance:* More than 130,000 adults and children are uninsured in the New Orleans area and will need help with viable long term options for public and private financing of their healthcare.
5. *Behavioral Health:* New Orleans needs additional capacity and resources for behavioral health services in the primary care, community and inpatient settings.
6. *Workforce:* New Orleans will need to train, recruit and retain the primary care workforce including physicians, health professionals and other members of a healthcare team. A detailed study should be conducted to propose a long-term action plan for developing the healthcare workforce.
7. *Reducing the Burden of Chronic Disease:* The City, State and local providers should support evidence-based best practices, policies and programs that enhance health and the impact of the healthcare system by addressing social and non-medical determinants of health, rather than medical services alone.
8. *Primary Care and Public Health Integration:* The City of New Orleans should collaborate with the healthcare system, including the local information exchange, to build the evidence base for developing and evaluating public health policy.
9. *Communication and Outreach:* The public is generally unaware of the available primary care safety net and the challenges faced by this safety net to provide essential healthcare services. The City of New Orleans and its partners should aggressively work to increase the awareness of services and healthcare funding options for area residents.
10. *Emergency Preparedness:* The primary care safety net should ensure that it is prepared for all hazards through hardening of facilities and through building technology and other infrastructure that can assure continuity of care.

## Introduction

In the spring of 2012, as part of the White House Strong Cities Strong Communities initiative (SC2), the City of New Orleans, with assistance from the U.S. Department of Health and Human Services (HHS) and the Robert Graham Center, undertook an effort to understand the current and projected capacity of the primary care safety net in the New Orleans area in order to meet the needs of the population and adapt to anticipated market changes in 2014. The ultimate goal of the New Orleans Health Access Planning project was to develop a comprehensive overview and set of policy recommendations for healthcare access in the New Orleans area for use in planning and policy making, in order to achieve and maintain equitable access to care. This plan will empower the community and policymakers to make better informed decisions in the coming years.

## Methodology

Dr. Karen DeSalvo, Health Commissioner for the City of New Orleans, co-chaired a collaborative effort with Dr. Anjum Khurshid from the Louisiana Public Health Institute (LPHI). They assembled an advisory group of 15 community members, consisting of leaders from an array of backgrounds including non-profit staff, hospital system executives, government officials, and representatives from the private insurance industry to form the Health Access Planning Task Force. The effort was supported by technical assistance from the HHS Assistant Secretary for Planning and Education (ASPE), the Health Resources and Services Administration (HRSA), and the Robert Graham Center. Data was assembled and analyzed from a variety of sources including Medicaid and Medicare claims data, 2010 American Community Survey, 2011 Louisiana Health Insurance Survey, Behavioral Risk Factor Surveillance System (BRFSS), Primary Care Access and Stabilization Grant (PCASG) data provided by LPHI, data from the Uniform Data System (UDS), and data collected by 504HealthNet. We sought the expertise of non-profit health and foundation organization staff, hospital system executives, primary care leaders, consumers, government officials, and representatives from the private insurance industry, who provided input and qualitative data throughout the process. This included a series of discussions with thought leaders in Louisiana to capture their perspectives on challenges and opportunities for the primary care safety net. We supplemented this information with a review of national best practices from scientific literature and other sources. Please see Appendix A for additional description of the methods and data.



Figure 1: Parish Map of Louisiana

## Geographical Scope

This report focuses on the greater New Orleans area. Where possible, data for the entire four parish region (also known as Louisiana Department of Health and Hospitals Region 1) comprised of Jefferson, Orleans, Plaquemines, and St. Bernard parishes were assessed and included. In some cases, data sets did not include all four parishes. In those cases, the specific parish referenced is identified.

## Policy Recommendations

As a result of data analysis, discussions with community members, and input from the Health Access Planning Task Force, the City of New Orleans proposes the following policy recommendations, which may achieve increased access to services in the Greater New Orleans area.

Area	Challenge	Approach
<p><b>Primary Care Sustainability and Patient Centered Medical Homes</b></p>	<p>The network of primary care safety net clinics is not financially stable. Therefore, there is a need to build stronger business functionality, expand capacity, and continue to expand a network of Patient Centered Medical Homes, in order to meet the current and growing demand and remain competitive in 2014</p>	<p>Community health clinics, school-based health centers, and other safety net providers should establish strategic partnerships in order to transition from independent small businesses to integrated networks of primary care organizations.</p> <p>This would allow clinics to consolidate business functions and take advantage of the opportunity to leverage economies of scale for external services and billing. Some of these networks should also consider affiliating with the Federally Qualified Health Centers (FQHC) in the area, as they are viable models with a stable financial outlook.</p> <p>Some smaller community health clinics lack an element of business sophistication and capacity due to funding restraints. To prepare for payment reforms and delivery system changes at the federal and state levels, a clinically integrated network should be developed to coordinate shared services, provide technical assistance to clinics when needed, coordinate practice management services, and provide accountability to quality and population management for improved outcomes.</p> <p>To encourage the expansion of Patient Centered Medical Homes, primary care providers should use National Committee for Quality Assurance guidelines to develop and measure high quality systems of care.</p>

Area	Challenge	Approach
<b>Specialty Care and Diagnostics</b>	Uninsured and underinsured patients have long wait times for access to specialty care services, or no access at all.	The service delivery challenge to specialty and procedural services must be addressed on a community-wide level. Key stakeholders should use evidence-based best practices and work collaboratively to identify means, including technology tools, to improve access to specialty care services for everyone, irrespective of payer source.
<b>Health Information Technology (HIT)</b>	The primary care safety net has a high adoption of HIT but requires continued investments, a sustainability plan, and upgrades in the HIT infrastructure in order to enable improved care coordination, to reduce system fragmentation and to improve the public's health.	The community should fully support the Greater New Orleans Health Information Exchange (GNOHIE) and work towards the sustainability of infrastructure and the case for care coordination and population management using evidence-based best practices. GNOHIE should also expand to include social services, emergency management services (EMS), pharmacy, and other data to add to clinical data in order to inform public health and address the social determinants of health.
<b>Coverage and Finance</b>	More than 126,000 are uninsured in the New Orleans area and will need help with viable long term options for public and private financing of their healthcare.	The City of New Orleans and State of Louisiana should work collaboratively, using evidence-based best practices, to enroll eligible clients into existing public and private insurance programs. Where applicable, this may require a shared outreach and programmatic effort. The community, in the absence of a Medicaid expansion in 2014, should also continue evaluation of non-traditional means of financing for the primary care safety net such as developing an insurance product. Supplemental grant funding or Section 1115 Medicaid Waivers may also be options to ensure that everyone in New Orleans has access to healthcare financing.

Area	Challenge	Approach
<b>Behavioral Health</b>	New Orleans needs additional capacity and resources for behavioral health services in the primary care, community and inpatient settings, as well as a plan to sustain these services.	<p>Stakeholders should continue to advocate for more behavioral health and substance abuse resources, including services integrated into primary care. Stakeholders should continue to make evidence-based decisions around behavioral health needs in the community.</p> <p>Given the trend of funding for behavioral health services, opportunities to streamline services and identify inefficiencies in the system should be closely examined by stakeholders. The City should form a behavioral health taskforce to focus on coordinating various pieces of the behavioral health system and integrating primary care and behavioral health services so patients receive seamless care.</p>
<b>Workforce</b>	New Orleans will need to train, recruit and retain a larger primary care workforce including physicians, nurses and allied health professionals and other members of the health team.	Successful policies and programs that have increased the density of primary care physicians and providers in the region should be continued or re-implemented to ensure that the area does not experience a shortage of these professionals as the system prepares for several changes in 2014 that will increase health insurance access. An adequate focus should be placed on deployment, training and incentives to achieve primary care workforce capacity objectives required to serve uninsured and underinsured populations.
<b>Reducing the Burden of Chronic Disease</b>	To reduce the burden of chronic illness on the community, the City should partner with stakeholders outside of the healthcare sector to address the social determinants of health.	The City, State and local providers should support evidence-based best practices, policies and programs that enhance health and the impact of the healthcare system by addressing social and non-medical determinants of health, rather than medical services alone.



<b>Area</b>	<b>Challenge</b>	<b>Approach</b>
<b>Public Health and Primary Care</b>	The City should collaborate with the healthcare system, including the local Health Information Exchange, to build the evidence base for developing and evaluating public health policy.	The primary care safety net, the Health Information Exchange, and other local providers and payers should use evidence-based best practices and work cooperatively to improve the public's health through setting a shared health agenda, data collection and sharing arrangements, as well as through working cooperatively to maximize system efficiency, population health, and funding and effectiveness. This system should take an all hazards emergency preparedness approach to prepare providers, patients and organizations in the event of an emergency.
<b>Outreach and Communication</b>	The public is generally unaware of available primary care safety net services.	The City and its partners should aggressively work to increase awareness of services and healthcare funding options for area residents. The community should use evidence-based best practices and collaborate on outreach efforts to ensure that residents are aware of healthcare programs and services available to them. Patient education on health, wellness and prevention should be included in this outreach effort.
<b>Emergency Preparedness</b>	The primary care and mental health safety-net care for a population that is at increased risk of poor outcomes related to emergencies.	The primary care safety net should ensure that it is prepared for all hazards through hardening of facilities and through building technology and other infrastructure that can assure continuity of care.

## Context and Current State

In August 2005, flooding associated with Hurricane Katrina devastated New Orleans and inundated the healthcare infrastructure across the continuum of care, from basic 911 to primary care to hospital services.<sup>1</sup> Though horrific in scope and impact, the widespread devastation of the healthcare infrastructure gave the New Orleans region an unprecedented opportunity to redesign a major American health sector from the ground up.<sup>2</sup>

As local providers and organizations of all types responded to the acute health crises and urgent primary care needs of the city's population, public health and community leaders began to consider a framework that would support the vision of a more patient-centered and effective health sector than the one decimated by Hurricane Katrina. The shared goal was to

develop a health system supported by a sustainable, flexible financial model that would maintain community-based services and focus more on prevention and primary care.<sup>3</sup> Key leaders came together to bring the vision to fruition through a series of planning coalitions. They set goals to 1) increase access to care; 2) develop care that would be nationally recognized for quality; 3) include even the most vulnerable; and 4) do so in a cost-effective manner.

The rationale for redesigning the healthcare system of the New Orleans region following Hurricane Katrina arose from the system's long-standing poor performance and the poor health outcomes of the population. The root causes of the region's poor performance and poor outcomes were thought to be related to the health system's design, including the low density of primary care physicians per population, high density of specialty care physicians, and higher number of hospital beds per capita than the national average.<sup>4</sup> Access to community-based primary care and prevention was a major challenge for low-income, uninsured populations in particular. In lieu of primary care, people relied on emergency rooms for care, and the state had the 8th highest emergency room visit rate per capita in the nation.<sup>5</sup>

## *Health Systems Changes after Hurricane Katrina*

Progress in realizing the vision of community-based infrastructure for community healthcare has been dramatic, and its success rests largely on the grassroots efforts that began just after Hurricane Katrina in the very early days of rescue and recovery. The network of community clinics in New Orleans has been called a national model by HHS Secretary Kathleen Sebelius since it has demonstrated success in developing Patient Centered Medical Home facilities, integrating primary care and mental health services, and creating new payment models to support team-based, innovative primary care services. In addition, it has integrated workforce training and research, expanding economic opportunity and innovation in real world settings.

A series of makeshift care sites cropped up across the greater New Orleans region, established by volunteers to meet the needs of those who were not evacuated, those who returned quickly, and first responders. Over time, some of the sites evolved into permanent facilities that were independently operated by a broad range of academic, government, and faith-based organizations. This newly founded community health center network is now an important source of primary care and behavioral health services for a population that historically had relied on a public hospital and emergency rooms for care.

The funding for the new primary care safety net has been largely from the public sector. In spring 2007, HHS established a special grant, the Primary Care Access and Stabilization Grant (PCASG) program to financially support the community health network and allow continued expansion to meet the population's primary care needs. This \$100 million grant for primary care allowed participating providers to maintain an open door policy, offering access to services for patients regardless of their ability to pay, thus establishing an inclusive approach to the development of the primary care network. HHS also provided \$35 million in funding for the expansion and retention of the primary care and mental health workforce

to support these community health sites. This program allowed organizations to provide incentives to recruit and retain hundreds of primary care and mental health clinicians in New Orleans.

The PCASG program ended in September 2010, and the Louisiana Section 1115(a) Medicaid Demonstration and Research Waiver, locally known as the Greater New Orleans Community Health Connection (GNOCHC), was approved in October 2010 to continue the innovative delivery model and access to care for the uninsured. The GNOCHC Waiver expanded the existing Medicaid eligibility to include the adult population ages 19-64 with an income up to 200% of the Federal Poverty Level (FPL) living in the four parish area.

## *Current State of New Orleans Health and Healthcare*

Seven years after Hurricane Katrina, the primary care safety net has grown and New Orleans ranks in the top 10% nationally of primary care providers per capita, according to County Health Rankings.<sup>6</sup> Greater New Orleans has 102 service sites for uninsured, under-insured, and low-income residents. These sites include mobile units, school-based health clinics, residency training sites, and those who serve special populations such as HIV-positive and homeless patients, representing a heterogeneous mix of providers delivering care to the highest need populations in innovative ways. These organizations represent a range of organizational types from small faith-based or community groups to larger FQHCs and academically affiliated medical centers. At present, 18 organizations and 51 clinical sites offer ongoing and coordinated primary care services in the greater New Orleans area. These organizations include four FQHCs, two FQHC look-alikes, and four community health centers whose services reflect FQHCs but that do not currently qualify. There are currently 28 Patient Centered Medical Homes, 12 of which have the highest recognition or are in the process of recertifying for Level 3. Over 200,000 people receive their care from over 450 healthcare professionals at these healthcare sites.<sup>7</sup> These clinics are highly accessible with an average wait time for an appointment of less than one week and services offered in seven different languages. Furthermore, some sites provide additional services including prescription assistance, counseling, health education groups, community gardens, and social services such as case management and Medicaid enrollment.

## *Estimating Outpatient Primary Care Service Areas in Greater New Orleans*

### **Primary Care and Access Stabilization Grant (PCASG) Data**

In order to understand where patients lived that received care from PCASG-funded clinics, the Robert Graham Center analyzed the service area for the PCASG program as a whole for calendar year 2010, and the analysis dataset contained 180 ZIP Code Tabulation Areas (ZCTAs) with a total of 161,115 patients. This is important as it allows for a deeper understanding of service areas and gaps. For this report, ZCTAs are used in order to compare patient

data to Census population data. ZIP codes can easily change, but ZCTAs remain the same for comparisons across years.

The total catchment area for ZCTAs with at least 10 patients included ZCTAs ranging from a low of 10 patients (12 ZCTAs) to a high of 8,367 patients (ZCTA 70119). ZCTAs from Mississippi (14 ZCTAs, 302 patients), Missouri (1 ZCTA, 10 patients) and Louisiana (165 ZCTAs, 160,802 patients) were included. A map of these data is included as Figure 2. Looking at the core catchment area comprised of 70% of patients from the ZCTAs with the most patients, only 22 ZCTAs were included with 113,884 patients. For this core catchment area, the ZCTAs were all within Jefferson, Orleans and St. Bernard Parishes. A map of this core catchment area is included as Figure 3.

In addition to looking at only the data from calendar year 2010, data from the entire project period, September 2007- September 2011, were analyzed across the whole program and for each participating organization. Maps of the program as a whole show a consistent spread of patients of the program reporting addresses across southern Louisiana during each year of the program. Examining patterns of patients by insurance types, the largest share of patients were uninsured (41.2%), followed by Medicaid (24.1%), and privately insured (14.1%). There were small percentages of Medicare and GNOCHC patients (Note: the GNOCHC program first started October 1, 2010, resulting in smaller percentages). See Figure 4 for a breakdown of patients by insurance. When examining the geographic patterns of patients by insurance type, ZCTAs with the highest rates of uninsured patients were mostly to the west of New Orleans while those with the highest rates of Medicaid patients were in and around New Orleans. Those with private insurance came mostly from the western and northern part of Louisiana and from Mississippi. Maps showing rates by insurance type can be found in Appendix C.

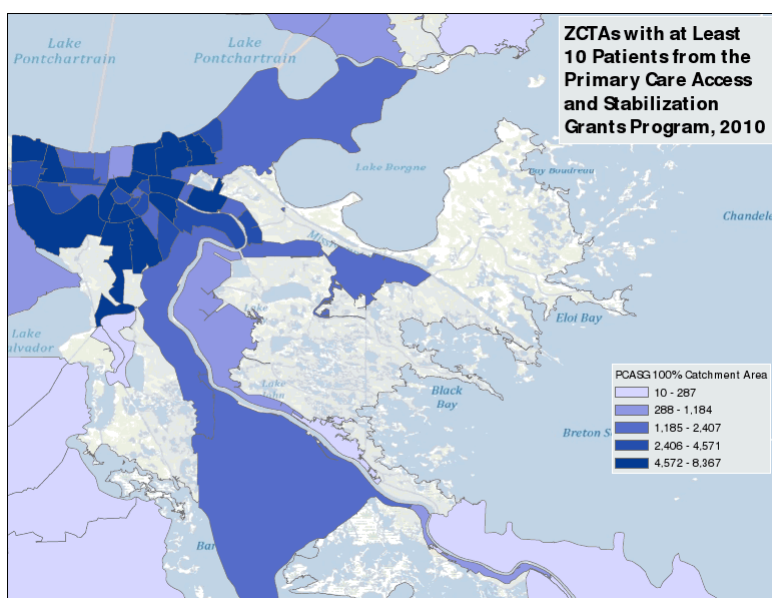


Figure 2: Where 100% of Patients Lived Who Were Served by PCASG Funded Clinics

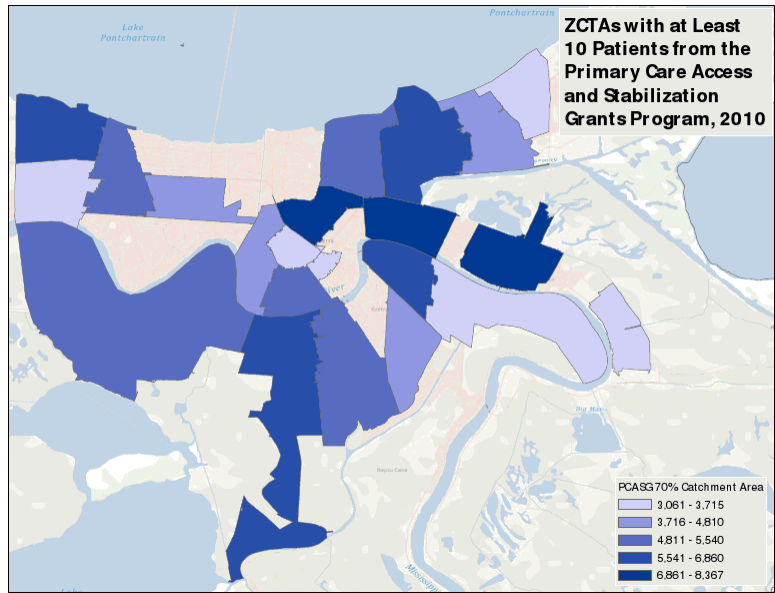


Figure 3: Where 70% of Patients Lived Who Were Served by PCASG Funded Clinics

Insurance Type	Number of Patients	Percent Uninsured
Uninsured	167,424	41.2
Medicaid	97,937	24.1
Private	57,183	14.1
Two or more	53,105	13.1
GNOCHC	14,529	3.6
Medicare	10,921	2.7
Unknown	5,045	1.2
<b>Total</b>	<b>403,144</b>	

Figure 4: Insurance Types for PCASG Data

### Federally-Funded Health Center Grantees

Although the PCASG data included data from the federally-funded health center grantees, which are often referred to as FQHCs, data from the Uniform Data System (UDS) for these organizations were analyzed separately. For this analysis, the Graham Center analyzed the five federally-funded health center grantee organizations that have locations within the four-parish study area. These organizations are Excelth, Inc., Jefferson Community Health Care Centers, the New Orleans Health Department, St. Charles Community Health Center, and St.

Thomas Community Health Center. For the UDS, these organizations combine their patient data from all sites that are within the scope of their federal grant. While all these organizations participated in PCASG through at least one site, not all of these sites participated in PCASG, and it is not certain what sites were counted in each grantee’s UDS report. As a result of this missing data, it was not possible to directly compare the PCASG and UDS data.

In the 2010 UDS dataset, these five organizations claimed a total of 53,295 patients. Grantee-level data within the UDS dataset are suppressed when there are fewer than 11 patients per ZCTA. Between patients with missing ZIP Codes and the data suppression, 51,644 patients (97% of the total) were included from 87 ZCTAs. This compares to 41,452 total patients and 40,042 patients with ZCTA information for the same organizations within the PCASG dataset. The total catchment area for ZCTAs with at least 11 patients included ZCTAs ranging from a low of 11 patients (4 ZCTAs) to a high of 3,146 patients (ZCTA 70072). This includes ZCTAs from Mississippi (1 ZCTA, 17 patients) and Louisiana (86 ZCTAs, 51,627 patients). A map of these data is included as Figure 5. Looking at the core catchment area comprised of 70% of patients from the ZCTAs with the most patients, only 22 ZCTAs were included with 36,269 patients. For this core catchment area, the ZCTAs were all within Jefferson, Orleans and St. Charles Parishes. A map of this core catchment area is included as Figure 6.

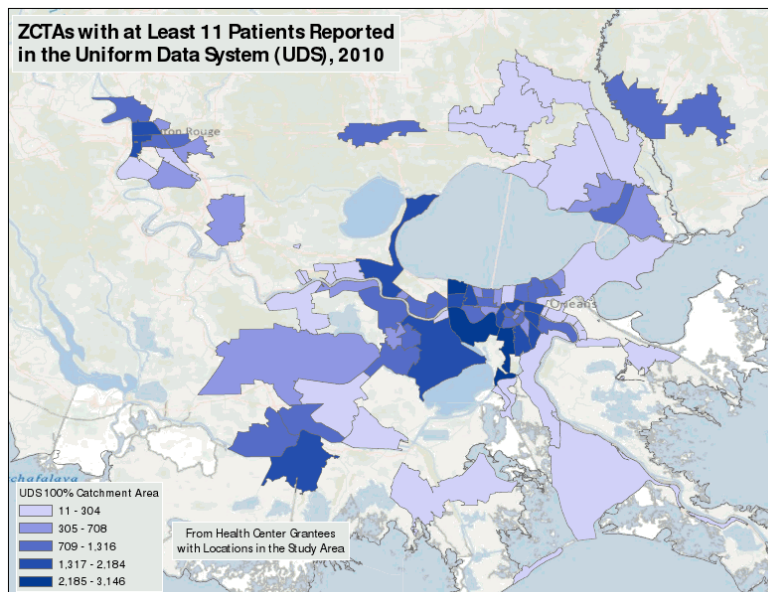


Figure 5: Where Patients who Visited Federally Funded Health Center Grantees Lived

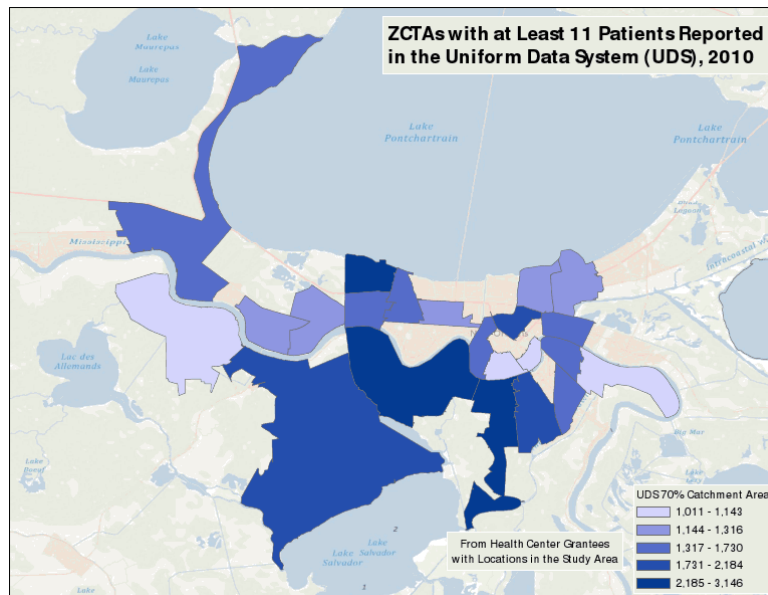


Figure 6: Where 70% of Patients who Visited Federally Funded Health Center Grantees Lived

### Need Indicators and Gradients Across ZCTAs

Since the PCASG program was funded primarily to provide services to underserved patients, patient data were compared to estimates of the low-income population based on the 2005-2009 American Community Survey and 2010 US Census at the ZCTA level.<sup>8</sup> The comparison of PCASG patients to the low-income population is only an estimate, as the PCASG dataset does not contain information regarding patient income levels. In the 100% catchment area, an estimated 14.7% of the low-income population and 5.3% of the total population received services at a PCASG funded organization. In the 70% core catchment area, an estimated 46.4% of the low-income population and 8.2% of the total population received services at a PCASG funded organization. Maps of these penetration rates are included in Appendix C.

As part of the UDS Mapper, FQHC data are readily available on the penetration of the low-income and total population of each ZCTA. In the 100% catchment area for the FQHCs, an estimated 11.3% of the low-income population and 4.1% of the total population received services at a health center grantee. In the 70% core catchment area, an estimated 15.6% of the low-income population and 5.8% of the total population received services at a health center grantee. Maps of these penetration rates are also included in Appendix C.

Because the penetration of the low-income population seemed low for this federally funded program, which is intended to provide funds to organizations that treat the underserved (with the low-income population being the best proxy for this population), an additional analysis was conducted comparing the penetration rates for the metropolitan statistical areas (MSA) of New Orleans and eight MSAs of similar size based on population as of April 1, 2010. The area included in the MSA for New Orleans is different from the study area and also includes St. Charles, St. John the Baptist, and St. Tammany parishes. For the MSA analysis, an estimated 12.6% of the low-income population and only 4.4% of the total population received

services at a health center grantee in 2010. This was similar to the other MSAs of similar population size with a few notable exceptions. Hartford, Connecticut, had a considerably higher penetration rate than the others and Buffalo, New York, had a considerably lower penetration rate than the others. See Figure 7 for a complete comparison. Population sizes vary because ZCTAs do not nest within MSAs, therefore people outside of the MSA are included in the UDS analysis.

MSA Rank*	MSA Main City*	Total Population for MSA*	Total Population, 2010 (based on ZCTAs) ^	Low Income Population, 2010 ^	Section 330 Patients, 2010 ^	Penetration of Total Population ^	Penetration of Low Income Pop ^
41	Memphis, TN	1,316,100	1,339,651	483,777	81,958	6.12%	16.94%
...							
43	Richmond, VA	1,258,251	1,372,079	330,727	55,210	4.02%	16.69%
44	Oklahoma City, OK	1,252,987	1,308,140	433,496	46,468	3.55%	10.72%
45	Hartford, CT	1,212,381	1,228,309	239,950	87,449	7.12%	36.44%
46	New Orleans, LA	1,167,764	1,195,435	411,711	51,967	4.35%	12.62%
47	Buffalo, NY	1,135,509	1,145,780	325,608	22,840	1.99%	7.01%
48	Raleigh, NC	1,130,490	1,261,246	325,685	38,603	3.06%	11.85%
49	Birmingham, AL	1,128,047	1,214,594	375,560	33,331	2.74%	8.88%
...							
54	Tulsa, OK	937,478	1,036,118	347,823	27,177	2.62%	7.81%

Figure 7: Comparison of FQHC Penetration Rates for Selected Metropolitan Statistical Areas (MSA)

\* Data obtained from [http://en.wikipedia.org/wiki/Table\\_of\\_United\\_States\\_Metropolitan\\_Statistical\\_Areas](http://en.wikipedia.org/wiki/Table_of_United_States_Metropolitan_Statistical_Areas). Accessed March 9, 2012.

^ Data obtained from the UDS Mapper, [www.udsmapper.org](http://www.udsmapper.org). Accessed March 9, 2012.

## Community Profile

In spite of vast improvements in infrastructure, the region still experiences significant health and healthcare challenges and disparities in access and health outcomes. New Orleans still ranks at the bottom of health rankings, 60th out of 64 parishes in the 49th healthiest state.<sup>9,10</sup> Not enough residents are linked to the services available to them, and there is a need to shift from emergency room care to neighborhood-based primary care. In addition, the New Orleans region has a high uninsured rate of 19%, and many low-income residents.

### Demographics

The population of the New Orleans region is resurging in the seven years since Hurricane Katrina. Orleans Parish has a population of 343,829 which is 41% of the region's population at 835,320. The majority (51.3%) of the population in the greater New Orleans area is white (including Hispanics or Latinos who identify as white) while 40% is African American, 3.4% is Asian, 5.8% identify as other, and less than 1% falls into the category of American Indian,



Alaskan Native, Native Hawaiian or Other Pacific Islander. Regarding ethnicity, 9.1% identify as being Hispanic or Latino of any race. There are slightly more women (51.4%) than men (48.6%) in the region. The average household size is 2.6 people, and the average family size is 3.1.

### *Employment, Income, and Poverty*

In Jefferson Parish, 5.8% of the workforce is unemployed, compared to 9.2% in Orleans Parish. In both parishes, the majority of those employed are in management, business, science, and arts occupations with the arts, entertainment, and recreation, and accommodation and food services as the largest industry groups.<sup>11</sup>

The mean household income for Jefferson Parish is \$63,703, which is slightly higher than the mean household income for Orleans parish at \$59,554. For Jefferson Parish, 8.2% of households have an income less than \$10,000 compared to 14% in Orleans Parish. Approximately 16% of the total population in Jefferson Parish lives below the poverty level, compared to 27% in Orleans Parish.<sup>12</sup> The federal poverty level for a family of four is an annual income of \$22,050. In Jefferson Parish, there are 154,050 people at or below 200% of poverty level compared to 161,804 people in Orleans Parish, with a total of 315,854 people across the two parishes.

### *Health Insurance Coverage*

According to the American Community Survey, in 2010, 80% of residents of Jefferson Parish had health insurance coverage, while 81% of Orleans Parish had health insurance coverage. Orleans Parish has a slightly higher percentage of the population covered by public programs at 36% compared to Jefferson Parish at 32%. In Jefferson Parish, 25% of people employed lack health insurance coverage, compared to 22% in Orleans Parish.

When looking at insurance coverage for all ages in the entire region, 38% receive coverage through their employer, 19% are uninsured, and 20% have only Medicare or Medicaid.

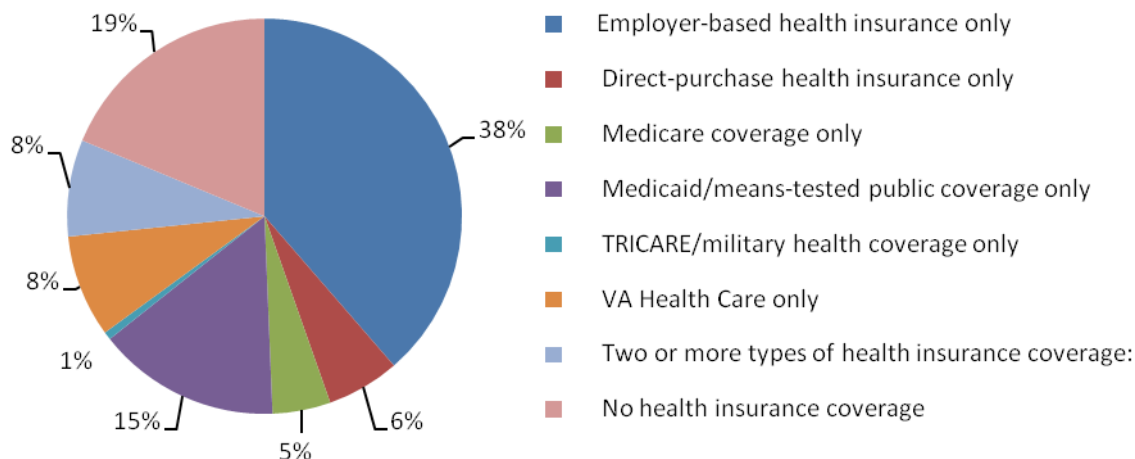
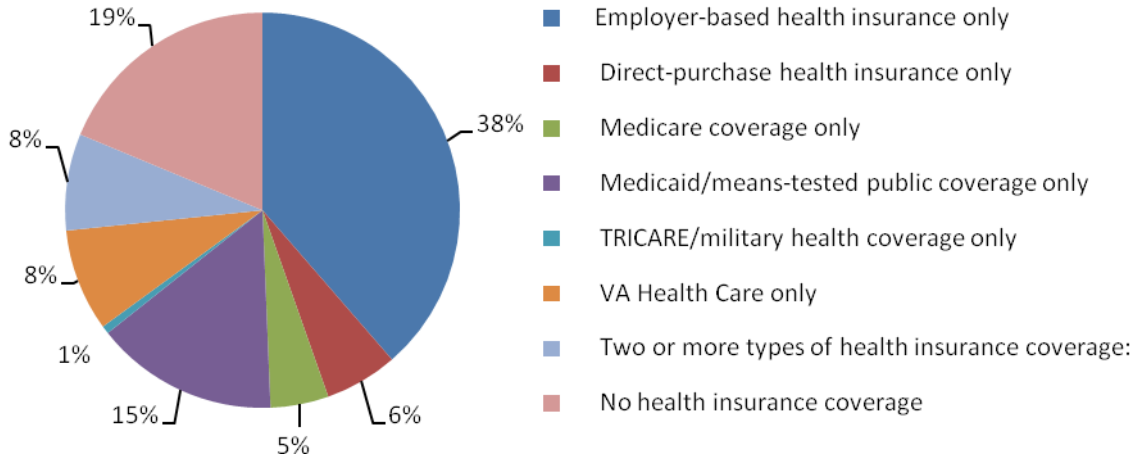


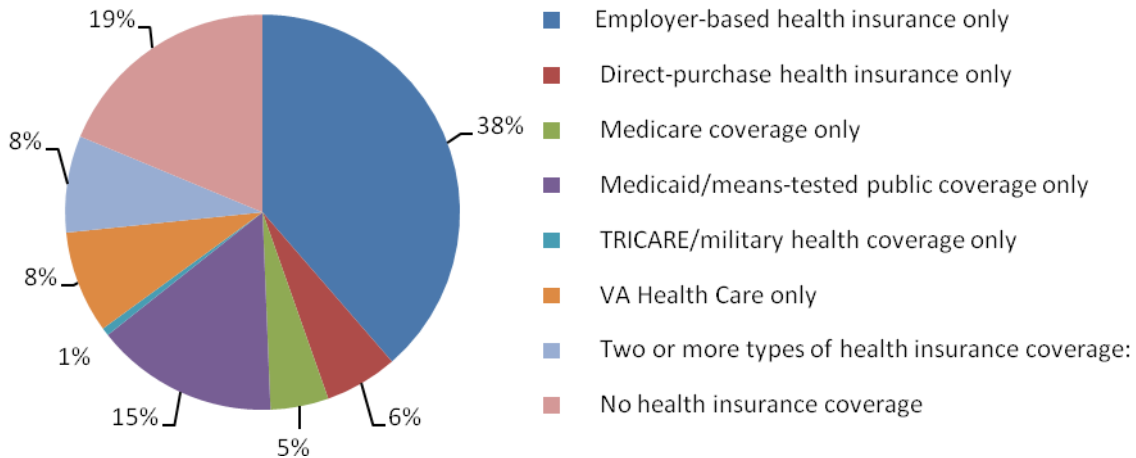
Figure 8: Three Year Estimate for Jefferson, Orleans, Plaquemines and St. Bernard Parishes, All Ages American Community Survey, 2008-2010  
Source: U.S. Census Bureau, American Community Survey, 2008-2010

The source of health insurance coverage varies between age groups, as 52% of non-elderly adults (19-64) were covered through employer sponsored insurance or a former employer, while 50% of children in the region obtained coverage through Medicaid and the Louisiana Children’s Health Insurance Program.<sup>13</sup>



Employer	Purchased Coverage	Former Employer	Not in Household	Medicare	Military	Medicaid	Uninsured	Total
68,883	7,240	2,055	4,989	2,258	3,782	102,261	12,148	<b>203,616</b>

Figure 9: Source of Coverage for the New Orleans Region’s Children (Under 19)  
Source: Louisiana Health Insurance Survey, 2011



Employer	Purchased Coverage	Former Employer	Not in Household	Medicare	Military	Medicaid	Uninsured	Total
261,834	39,489	22,803	6,819	23,416	19,218	54,107	126,101	<b>553,787</b>

Figure 10: Source of Coverage for Adults (19-64), New Orleans Region  
Source: Louisiana Health Insurance Survey, 2011

## Public Coverage

### *Medicare and Dual Enrollees*

According to analysis of Medicare claims data, a total of 67,234 beneficiaries were enrolled in Medicare Part A/B fee-for-service for at least one month in 2010 across the four-parish area. Approximately 57% are White, 39% African American, 2% Hispanic, 1% Asian, and 1% as “other” race, while 56% are female and 44% are male. Thirty-three percent or 22,187 beneficiaries, are dually enrolled in both Medicare and Medicaid. When looking at beneficiaries with continuous enrollment for 2010, 15% of the population has diabetes, which is the most common chronic condition. Twenty percent of the dual population has diabetes, which is also the most common chronic condition for this population.<sup>14</sup>

### *Medicaid*

For the Medicaid fee-for-service population, 63% are African American, 22% are White, 6% are Hispanic, 2% are Asian and 7% are other or unknown. Forty percent are male, and 60% are female. The most frequent claim filed by providers across all parishes was for essential hypertension, followed by normal pregnancy. When ranked by number of beneficiaries, the most frequent claim was for acute upper respiratory infections of multiple or unspecified sites while the second was the health supervision of an infant or child.<sup>15</sup>

### *Greater New Orleans Community Health Connection (GNOCHC)*

Over 51,000 people are enrolled in the GNOCHC Waiver, which expands eligibility up to 200% FPL.

## Uninsured

New Orleans has the highest regional rate for uninsured children in Louisiana, and the highest regional rate for children eligible for Medicaid but not enrolled in Louisiana.<sup>16</sup> The number of uninsured children in the area is estimated to have increased slightly in 2011 to 12,148 or 6.2%.<sup>17</sup> Of these, an estimated 5,420 children are eligible for Medicaid but not enrolled.

Between 2009 and 2011, the number of uninsured adults increased in the New Orleans region from 100,222 to 126,101, which caused uninsured adult rates to increase from 20.2% to 24.1%.<sup>18</sup> In 2011, there were 80,359 uninsured adults under 200% of the FPL.

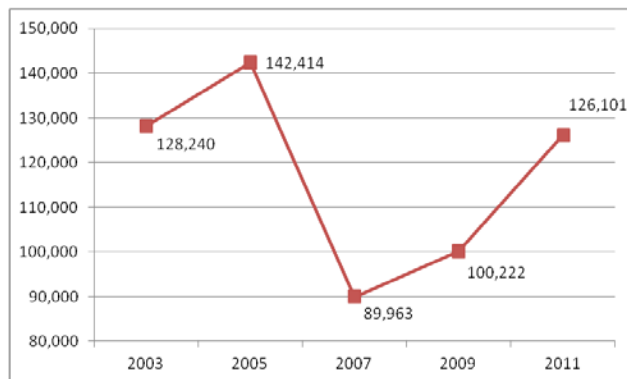


Figure 11: Uninsured Estimates for Nonelderly Adults (19-64), New Orleans Region  
Source: Louisiana Health Insurance Survey, 2011

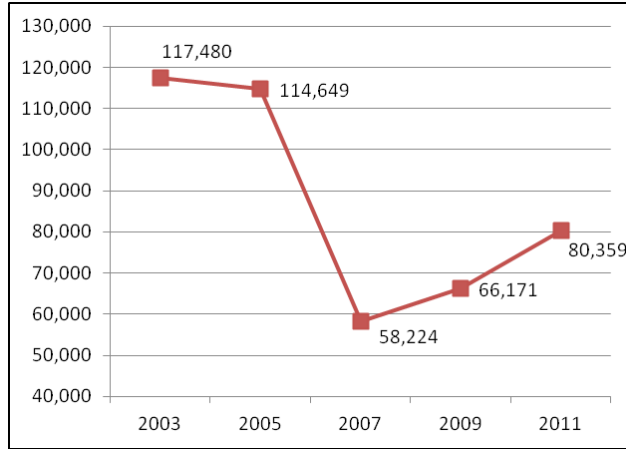
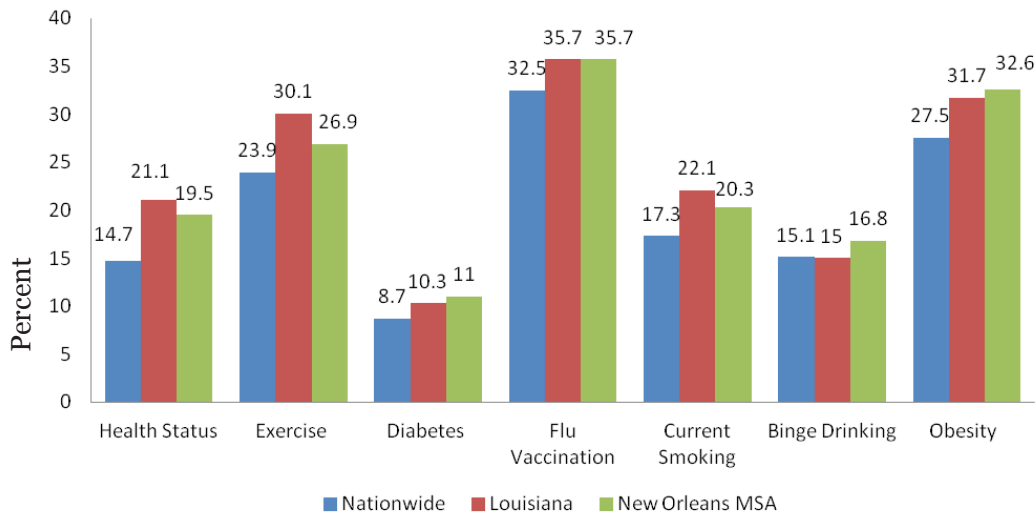


Figure 12: Uninsured Estimates for Adults (19-64) Under 200% of FPL, New Orleans Region  
Source: Louisiana Health Insurance Survey, 2011

## Community Health Status

### Behavioral Risk Factor Surveillance System 2010

When compared to the nation, the New Orleans region has slightly worse health indicators in every category, although when compared to the State, it is slightly better for health status, exercise and smoking.



<b>Health Status</b>	Percentage of adults reporting general health as fair or poor
<b>Exercise</b>	Percentage of adults reporting doing no leisure time exercise or physical activity in the past 30 days
<b>Diabetes</b>	Percentage of adults told by doctor they have diabetes
<b>Flu Vaccination</b>	Percentage of adults aged 65 or older reporting not having had a flu shot within the past 12 months
<b>Current Smoking</b>	Percentage of adults reporting having smoked at least 100 cigarettes in their lifetime and currently smoke
<b>Binge Drinking</b>	Percentage of adults reporting having five or more drinks on an occasion, one or more times in the past month
<b>Obesity</b>	Percentage of adults reporting Body Mass Index greater than or equal to 30.0

Figure 13: Percentage of Adults Reporting Selected Health Risks  
New Orleans-Metairie-Kenner, LA Metropolitan Statistical Area  
Source: Behavioral Risk Factor Surveillance System (BRFSS) 2010<sup>19,20</sup>

Kaiser Family Foundation Survey 2010

The Kaiser Family Foundation conducted a series of three surveys over five years in Orleans Parish which included questions on health and healthcare. The survey found that in 2010, over half of the adults report having a chronic condition or disability, with hypertension being the most commonly reported condition.

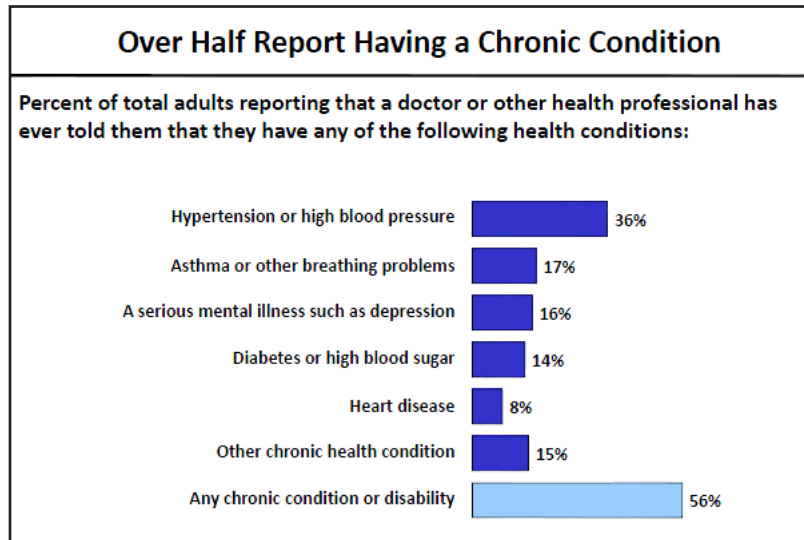


Figure 14: Kaiser Family Foundation Survey 2010, Percent of Adults in Orleans Parish who Report Having a Chronic Condition

Additionally, more people reported their health needs were being met, although 15% reported that they were not being met at all well or too well.

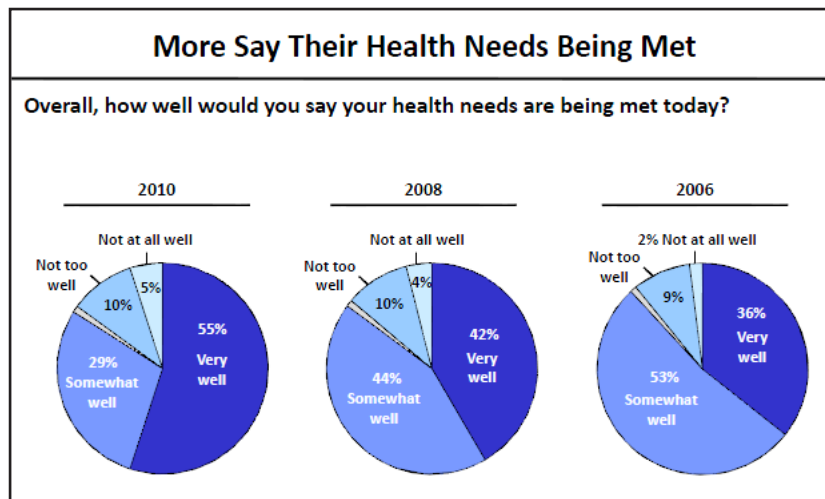


Figure 15: Kaiser Family Foundation Survey 2010, Percentage of Adults in Orleans Parish who Report Their Health Needs Were Being Met  
Note: Gray slice on each pie denotes the 1% in each year who answered the question "don't know" or refused.

Twenty-seven percent reported that their usual place of care was in the emergency room (ER), or that they did not have a usual source of care, which was down from 34% in 2006. For the uninsured, 51% report their usual source of care is the emergency room. If that percent is applied to the uninsured adult population in the four-parish area, then approximately 40,000 adults have no usual source of care outside of the emergency room.

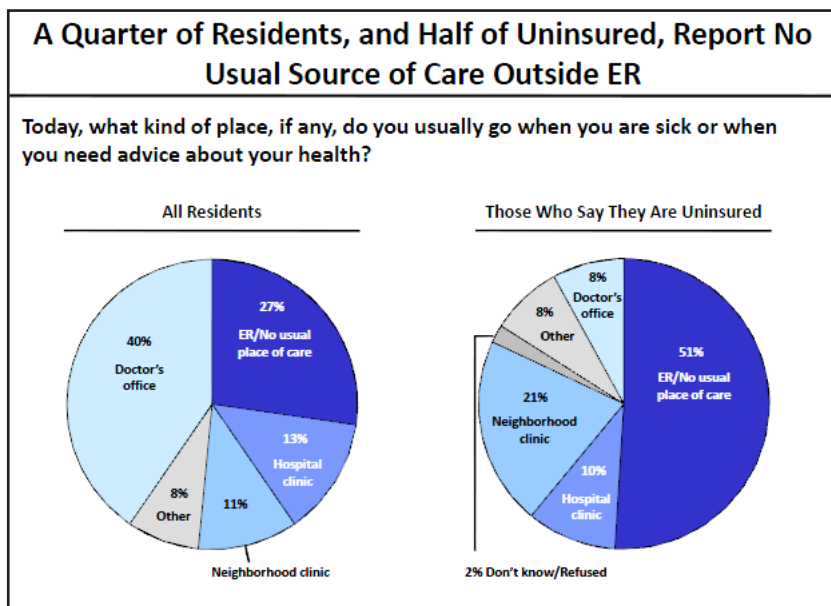


Figure 16: Usual Source of Care for Adults in Orleans Parish

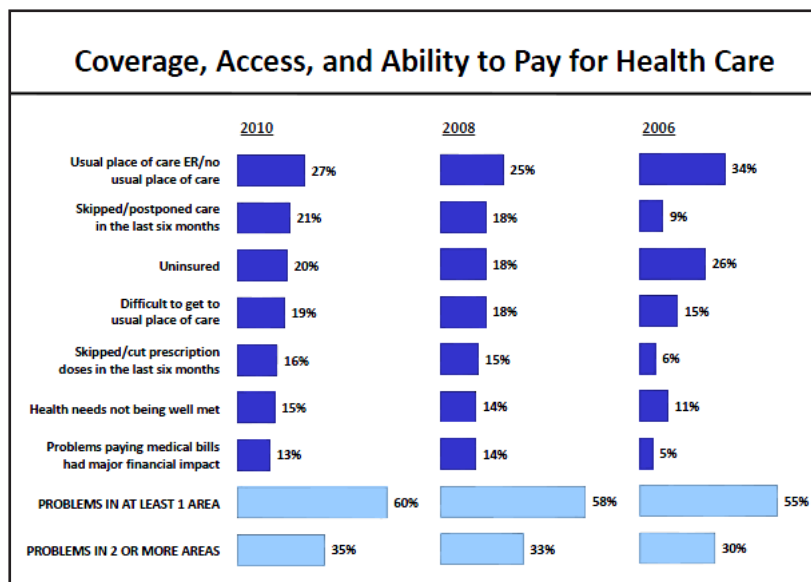


Figure 17: Percentage of Coverage, Access, and Ability to Pay for Healthcare in Orleans Parish

## *Specialty Care Access*

The safety net primarily provides primary care and behavioral health services, and there is a growing concern for access to specialty care services for the uninsured and underinsured. The local public hospital run by the Louisiana State University Health System and formerly known as Charity Hospital offers a Medically Indigent Program for specialty care services. However, LSU Health System reports an average of five month wait times for these specialty care services. Amongst the safety net community-based clinics, 21 sites offer some specialty care a few hours a week. The most commonly offered services are gynecology and psychiatry. More limited specialty care includes obstetrics, podiatry, cardiology, and rheumatology. All safety net providers in the New Orleans area refer to two sites for mammography. However, based on some recent discussions with primary care physicians in community clinics, wait times still persist for specialty care that involves procedures that cannot be performed in primary care clinic settings. Gaps also remain in a system-wide exchange of relevant and timely information between specialists and primary care physicians to improve the efficient uses of existing specialty care capacity.

## *Community Outreach and Awareness*

Enrollment numbers show that the community's awareness of benefit programs, such as the GNOCHC Waiver or the Louisiana Children's Health Insurance Program, can be improved upon. Approximately half (5,420) of the greater New Orleans area's uninsured children (12,148) are Medicaid or LaCHIP eligible, but not yet enrolled. The public is generally unaware of these primary care safety net services and an aggressive, targeted outreach effort is needed to ensure that residents are aware.

## *Emergency Preparedness*

The primary care safety net has been resilient to disaster, but providers should also enhance outreach to residents regarding emergency preparedness measures for themselves and their patients. The City has developed and launched a comprehensive emergency preparedness plan<sup>21</sup> and manages targeted outreach to those with medical mobility needs. Gaps remain in a city-wide, comprehensive emergency preparedness plan that closely involves primary care providers.

## *Health Information Technology*

HIT has advanced dramatically in the New Orleans area and is playing a vital role in facilitating improved health quality and access. As of August 2012, community clinics and hospitals are able to communicate via a community-wide health information exchange, the Greater New Orleans Health Information Exchange (GNOHIE), a regional grant program

funded by the National Coordinator for Health Information Technology through the Beacon Communities program. This will connect to the Louisiana Health Information Exchange (LaHIE), giving the primary care safety net the ability to track individual patients across the entire healthcare system as well as better manage population health. With the capacity of healthcare services and initiatives underway to maximize their accessibility and quality, New Orleans is well positioned to considerably improve health outcomes.

In April 2010, the HHS office of the National Coordinator for Health Information Technology chose the Greater New Orleans area as one of 17 Beacon Communities in the country. The goal of the Beacon program is to demonstrate and accelerate the role of information technology in population health improvement across the continuum of care. All major hospital systems and community-based primary care providers (504 HealthNet)<sup>22</sup> are participating in this community collaborative which is coordinated by the Louisiana Public Health Institute. The project focuses on chronic disease, mainly diabetes and cardiovascular disease, by accomplishing the following:

- Improving quality of care at the population level in measurable ways;
- Implementing HIT as enabler for efficiency and scalability;
- Developing community-level, chronic disease standards of care; and
- Implementing sustainable quality improvement efforts.

GNOHIE is a community-shared HIT infrastructure that is facilitating care coordination and chronic disease management by enhancing information and process linkages across health systems, with the goal of improving the quality of care at the population level. The GNOHIE is linked to electronic medical records and health information systems of the community health clinics and hospitals, respectively, to allow seamless exchange of health information in a HIPAA-compliant, secure manner to benefit patient care while maintaining privacy and confidentiality of personal health information. The GNOHIE infrastructure creates a unique opportunity for the providers in the New Orleans area to share information in meaningful ways. It allows for the creation of community-wide disease registries, an electronic specialty referral system, and notifications of emergency department or inpatient encounters to a patient's primary care provider for continuity of care.

The GNOHIE started exchange of health information with community partners in June 2012, while live exchange of notifications between care-settings began in July 2012. For the first time in New Orleans' history, this has created the ability to track patients across the healthcare continuum and use data analytics to analyze utilization and disease trends, identify gaps in care and coordination, and measure outcomes at the population level. The Louisiana Public Health Institute provides the back office technical support for maintaining the GNOHIE, while a community-led organizational structure manages the data sharing policies and development of use cases.



## Workforce

The Robert Graham Center assisted the City of New Orleans in evaluating the capacity of the workforce in New Orleans by analyzing data in the 2012 American Medical Association (AMA) Masterfile. The Graham Center identified primary care physicians in the AMA Masterfile by selecting physicians in direct patient care with a primary, self-designated specialty of family medicine, general practice, general internal medicine, general pediatrics, or geriatrics. To address the fact that the AMA Masterfile also undercounts the number of retirees,<sup>23</sup> the counts were adjusted based on a comparison of the age distribution of physicians in the AMA Masterfile with the distribution of physicians in the National Provider Identifier database. Physician counts were also adjusted downward by 20% in the AMA Masterfile for general internists to account for those functioning as hospitalists and in other non-primary care settings.<sup>24</sup> Finally, counts for family physicians, pediatricians, and geriatricians were adjusted downward by 5% to account for those working primarily in urgent or emergency care.<sup>25</sup>

The results in the below table compare the workforce in a) the New Orleans four parish region, b) Louisiana, c) West South Central Region states including Texas, Louisiana, Oklahoma and Arkansas, and d) the nation as a whole. There are an estimated 629 primary care and 1,872 subspecialist physicians in direct patient care in the four parish area.

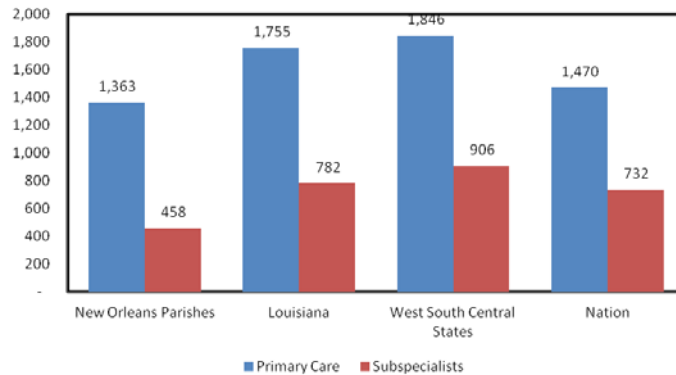


Figure 18: Comparison of Ratios of Population to Primary Care and Subspecialist Workforce

Reflecting the concentration of physicians in urban areas, the population-to-primary care physician ratios are substantially lower in New Orleans compared to the state as a whole. Compared to other states in the West South Central region, Louisiana has substantially more primary care and subspecialist physicians on a per capita basis. Louisiana also does slightly better than the nation as a whole.

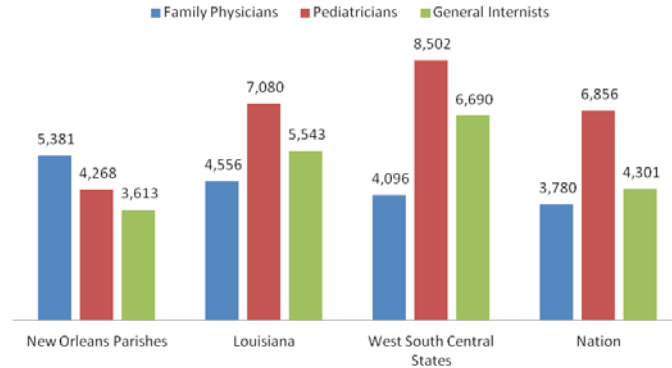


Figure 19: Population-to-Primary Care Physician Ratio, by Specialty

The primary care workforce in New Orleans consists of more general internists than either family physicians or pediatricians. Population-to-physicians ratios for pediatricians and general internists (but not family physicians) are lower in New Orleans than for Louisiana as a whole (Figure 18). Across all primary care specialties, these ratios are substantially higher in Louisiana compared to the nation as a whole.

In addition, a phone survey was conducted in the spring of 2012 to collect data on the number of full-time equivalent (FTE) physicians employed and unique patients seen in 2011 at 43 primary care safety net sites which are all part of the nonprofit 504HealthNet. Across these 43 sites 111 FTE physicians (defined as either M.D. or D.O.) provided services to 152,497 unique patients in 2011.<sup>26</sup>

Successful policies and programs that have increased the density of primary care physicians and providers in the region should be continued or re-implemented to ensure that the area does not experience a shortage of these professionals as the system prepares for several changes in 2014 that will increase health insurance access. An adequate focus should be placed on deployment, training and incentives to achieve primary care workforce capacity objectives requirements to serve uninsured and underinsured populations.

## *Summary of General Discussions with Community Members*

A key component of understanding healthcare access included holding discussions with local and state leaders to collectively paint an accurate picture of services as they exist now, and help identify healthcare service gaps across the city, with a particular focus on medically underserved groups. The perspectives of local leaders are critical to providing an accurate and comprehensive understanding of the current system, and to present ideas about best practices to support the healthcare system currently and in the future. Over approximately five weeks, Dr. Roderick King with HRSA, Susan Todd with HHS and Ayame Nagatani Dinkler with the New Orleans Health Department spoke with 15 community leaders from various backgrounds and perspectives including non-profit staff, hospital system executives, government officials, and representatives from the private insurance industry. The following

findings represent their opinions on the state of healthcare access in New Orleans. Four key themes were identified from these key informant discussions, and are summarized below:

- The importance of primary care
- Developing a community-based system of care
- Ensuring a health workforce to meet current and future needs
- Supporting a community approach to health

### **Primary Care**

Everyone involved in the conversations stressed the importance of primary care, and that the entryway into the healthcare system should be through a primary care portal. Primary care was frequently identified as a strength for New Orleans since the city has made substantial progress in improving the number and quality of the primary care clinics post-Katrina. However, many of the community leaders expressed concern about the stability and sustainability of these clinics that serve low-income patients. While New Orleans is in the top 10% nationally for the rate of primary care physicians per capita,<sup>27</sup> not all primary care physicians provide care to the Medicaid and uninsured populations, creating access constraints to primary care. Funding was cited as the main obstacle impeding the expansion of community health centers serving low-income patients. Community members opined that Medicaid reimbursement rates are insufficient to maintain a basic infrastructure, and these clinics also serve a number of uninsured patients who are unable to pay for needed healthcare services. Currently, these clinics are supported through HRSA funding and Medicaid waivers, however, when faced with diminishing reimbursements, the clinics will not be able to remain financially solvent.

One suggested approach to address this is for the clinics to establish strategic partnerships to allow them to transition from independent small businesses to networks of primary care physicians. This would allow clinics to consolidate some of their business functions and take advantage of the opportunity to leverage economies of scale for external services and billing. Some of these networks should also affiliate with the FQHC in the area, because it is a more viable model with a more stable finance structure. Additionally, some of the clinics lack an element of business sophistication and business capacity needed to market their services in their local areas, and should develop a public relations strategy and development plan. Clinics should work on branding themselves as where the neighborhood goes for care in order to increase their payer mix. Health Reform and the Medicaid expansion were also forces identified that would improve the payer mix and the financial standing of these clinics, although that will not occur until 2014. While the mission and facilities are in place for these clinics, it is difficult for organizations to think beyond an 18-month timeframe and find a mid-term vision.

### **Developing a Community-Based System of Care**

Another common theme from the discussions was that New Orleans should work on developing a more robust safety net system, and create an integrated healthcare system with a single

point of entry. New Orleans currently has all of the elements to create a coordinated system of care and is not lacking in facilities or expertise. However, in order to create such a system, each component needs to be linked together in a network approach. Community members commented that care needs to be integrated, not duplicated, and it is essential to have a seamless connection with secondary and tertiary care. The current system does not have the capacity to serve low-income patients needing mental health services and is lacking in access to specialty care for these patients. There are also gaps in how primary care practitioners refer patients to dentists. While electronic medical records (EMR) will help facilitate linking services and care, sustainable institutional relationships need to be developed to decrease fragmentation and create a coordinated system of care.

New Orleans needs to move to a care-centered, population management model where efforts can be focused on wellness, chronic disease management, and prevention education. Having a system that connects all the pieces and is responsible for much of the population provides better care than having a managed care model that does not connect the components. There is a system-level paradigm that has to shift regarding provider accountability and who takes the financial risk for health outcomes.

Participants in the discussions were of the opinion that the New Orleans safety net needs a network that functions similar to a large clinically integrated physician network as a model, and has the opportunity to develop the healthcare system as an Accountable Care Organization-like entity that wraps in the neighborhood health centers while looking at common expectations. This entity would be a mechanism that moves people and organizations to work together more efficiently, and would require the engagement of the hospitals in the process. Moving to a system of care and a new care-centered model is a collaborative effort for everyone in the city involved in providing healthcare services. New Orleans has the opportunity to grow the primary care base, protect the clinics, and manage patients across the spectrum. New Orleans should link the expansion of primary care to an adequate payment structure through the coordinated care networks or exchanges that allows primary care physicians to work as they are trained. Early evidence from health system innovation in the region demonstrates that with the appropriate incentives, primary care providers do the work they are trained to do. The system should give more money to primary care physicians and hold them accountable while allowing physicians to manage patients across the spectrum of care.

Community leaders stated that creating a healthy system is dependent on funding and financing for primary care, which is the basis for the system. Due to policy and funding structures, the current structure is very fragmented and not conducive to collaboration. Perverse incentives undermine collaborative efforts and there are few incentives or platforms for communication or collaboration. While some level of competition is healthy, it is important to share knowledge and build collaboration instead of fighting over service areas, particularly for the FQHCs and small clinics.

## **Workforce**

All of the community leaders identified the physician workforce as a major challenge moving forward, particularly with regards to where primary care physicians are practicing and

whether or not they will see safety net patients. New Orleans is faced with an aging, understaffed primary care workforce. The average physician age in New Orleans is approximately 58, and as providers age, they typically do not work in the safety net market. Some individuals expressed concern that older physicians will retire rather than adapt to the changing landscape. There are also workforce shortages for physician assistants, nurse practitioners, nurses, and licensed behavioral health staff serving safety net patients.

Community leaders stated that the New Orleans healthcare community does not have a solid understanding of how many providers are serving low-income patients. Nor does it have a unified approach to determine the number of providers needed to increase the workforce through medical and nursing schools, utilizing incentives at the national level, and other measures. Other than making the needs known to the training institutions such as LSU and Tulane University, the community is not involved in developing the workforce. Without enough providers, in 2014 a potential Medicaid expansion under the Affordable Care Act will cause strain on the delivery system previously unfelt. New Orleans should consider addressing the shortage in primary care physicians by increasing the number of professionals who can support the model of team-based care, and should embed physician assistants and nurse practitioners in various community organizations.

Additional workforce shortage areas mentioned by the community leaders include people trained in care management, disease management and team-based care in a primary care setting. Organizations are also lacking workers skilled in the following areas: health information technology, informatics to analyze claims data, coding, billing, and effectively building the business process side of primary care.

### **Community Approach to Health**

According to community leaders, ideally, New Orleans would have a neighborhood-based system, with smaller hospitals that support viable community-based healthcare and neighborhood-based healthcare. This robust system would function along the model of a medical or health home that intersects patients early in their lives and promotes healthy lifestyles, wellness with routine health maintenance, and early interventions for chronic diseases. There would be a stronger emphasis on prevention, planning, and data-driven coordinated care. The community would address social determinants of health, and actually base the healthcare system around addressing these determinants rather than just medical services. Community leaders stated that healthcare must happen in an environment that supports whole health and includes education, healthy food access, places for walking, and a positive built environment. They felt that people need to take more responsibility for their health and develop healthy behaviors and lifestyles. Improving the health status of the community will help decrease the disease burden and the strain on the healthcare system.

### *Forces of Change*

In the coming years, several forces of change on a local and national level will impact coverage, access to and the delivery of healthcare in New Orleans including: the construction and opening of the University Medical Center, VA Hospital, and hospital in New Orleans East;

the state's transition into a managed Medicaid model through Bayou Health and managed behavioral health services through Magellan; expanded healthcare coverage through the Affordable Care Act; new CMS reimbursement models, such as Accountable Care Organizations; and the success of the GNOCHC Waiver. It is important to understand the profile of the community in order to understand how these forces of change will impact the delivery of service and access to care in the region.

## Implications of the Patient Protection and Affordable Care Act (ACA)

The Patient Protection and Affordable Care Act (ACA) will have a broad impact on the New Orleans area healthcare safety net as the ACA not only expands insurance coverage opportunities, but also makes adjustments to the financing structure for the safety net system. These changes will provide opportunities for the Greater New Orleans area, but they also will create challenges as the funding streams change. On June 28, 2012, the Supreme Court upheld the individual mandate requiring citizens to have insurance, but ruled that states may have the option of expanding their Medicaid program. Under the ACA, Medicaid eligibility is expanded to include adults with annual incomes up to effectively 138% of the federal poverty level. The federal government will pay 100% of the costs of covering those eligible for the expansion from 2014 to 2016 and will then phase down its federal contribution to 90% by 2020.

Governor Bobby Jindal has stated that Louisiana will not expand the Medicaid program.<sup>28</sup> However, even if Louisiana participates in the Medicaid expansion, many residents will still lack insurance and rely on the safety net for care. As of 2011, approximately 126,101 people<sup>29</sup> or 24.1% of the adult population 19-64, in the New Orleans area were uninsured, which is higher than the national average of approximately 16%.<sup>30</sup> National estimates project that after the implementation of health reform, approximately 8.7% of the population will remain uninsured.<sup>31</sup> Even though the demographics and insurance take-up rates for New Orleans would be different than national demographics, using this national estimate as a starting point results in approximately 48,000 adults remaining uninsured in the Greater New Orleans area. Louisiana residents who remain uninsured will, generally speaking, fall into the following categories: those eligible for Medicaid or subsidies in the exchanges but who are not enrolled in either program, undocumented immigrants, those exempt from the individual mandate because they do not have an affordable insurance option, and those subject to the mandate but who do not purchase health insurance.<sup>32</sup>

If Louisiana does not expand its Medicaid program, New Orleans will have an even higher number of uninsured residents, continuing to shift costs to the insured and increasing uncompensated care to healthcare providers. The New Orleans region currently has approximately 80,000 uninsured adults below 200% FPL, with rough estimates of approximately 68,000 people below 138% FPL, and approximately 77,291 adults between 100% and 138% FPL that would have otherwise been eligible for Medicaid. Many would fall into a gap because they would neither qualify for Medicaid under current rules nor be eligible for

subsidized private insurance in the Health Insurance Exchanges (Exchanges). Currently, individuals below 100% FPL are ineligible for subsidies in the Exchanges, and HHS has issued guidance that those below 100% FPL will be exempt from the individual mandate.<sup>33</sup> Citizens between 100% and 400% FPL will have the option to purchase insurance on the federally-facilitated health insurance exchange, and will be eligible for subsidized coverage, making coverage more affordable. However, cost-sharing requirements would be higher than they would have been under Medicaid, and some may find purchasing health insurance on the Exchange is too expensive. With few new options for insurance coverage for the majority of the uninsured, many will remain uninsured. Whether or not Louisiana expands Medicaid will affect these people, their employers, and the providers who serve them.

In addition, the GNOCHC Medicaid 1115 Waiver is currently only effective through December 31, 2013. If it is not extended, the majority of the 51,000 people currently enrolled, who would have been transitioned over to Medicaid or subsidized coverage in the exchanges, will not have health insurance in 2014. As the funding streams change, and disproportionate share hospital payments (DSH) to the State decrease, the safety net will have to find additional funding mechanisms and ways to cover uncompensated care costs as DSH funding is relied on to finance the LSU public hospitals. The relief health reform was expected to bring to providers and residents will no longer be realized, increasing the need for New Orleans to address stabilizing the safety net.

#### *Opportunities*

The ACA establishes health insurance exchanges in each state which will provide new opportunities and a competitive market for purchasing insurance in the individual or small group market.<sup>34</sup> Americans with an income between 100% and 400% of the FPL are eligible for federal subsidies to purchase coverage,<sup>35</sup> and all plans available on the exchange must offer a comprehensive package of items and services. Governor Bobby Jindal has announced that Louisiana will have a federally-facilitated health insurance exchange,<sup>36</sup> which means that HHS will establish and operate the Exchange, either directly or through an agreement with a nonprofit organization.<sup>37</sup>

The ACA not only provides investments for provider capacity and care coordination, but increases funding for existing community health centers. The law also includes additional private insurance reforms that improve coverage such as allowing young adults to remain on their parents' health insurance until age 26, removing lifetime limits, and prohibiting pre-existing condition exclusions.<sup>38</sup> All of these provisions will strengthen health insurance coverage for New Orleans residents.

#### *Additional Challenges*

The recent economic recession in addition to the downward trend in employer-sponsored health insurance coverage has increased the number of uninsured and those who rely on the safety net.<sup>39</sup> The newly insured population in 2014 will be more likely to seek services than the currently insured population thereby increasing the role of safety net providers in the community as the initial utilization of services increases.<sup>40</sup> Safety net providers will be faced with responding to the immediate challenge of increasing demand for services as coverage is expanded.

Other potential challenges are gaps in coverage, underinsurance and slim benefit packages. While the packages offered in the Louisiana health insurance exchange must meet a minimum benchmark standard, people may remain underinsured, and without coverage for certain necessary services. If the State chooses to participate in the Medicaid expansion, beneficiaries will not be enrolled into Louisiana's traditional Medicaid benefit package, but will instead be enrolled in a separate benefit package. If patients need services beyond what their policies cover, safety net providers may be at financial risk. Additionally, as the state budget is under pressure, the legislature may choose to freeze Medicaid provider payments, or implement cuts in Medicaid provider payments, putting further financial pressure on safety net providers.

In addition, the newly insured population will not necessarily be linked to a medical home and a primary care physician. For example, looking at the GNOCHC population, in seven months from October 1, 2011 through May 1, 2012, only approximately half of the 51,000 people enrolled have visited a provider for primary care or behavioral health services, although these patients may be receiving care through emergency rooms.<sup>41</sup> Patient and community education are needed to link patients to primary care and better manage population health.

#### *Workforce Impact*

Provisions in the ACA focus on expanding and developing the primary care workforce by providing funding that supports physician residencies in primary care, programs that produce primary care physicians, and scholarships and loan repayment programs for providers working in underserved areas.<sup>42</sup> New Orleans has the potential to expand the primary care workforce under these provisions that will occur on a national level.

#### *Health Disparities*

Racial and ethnic minorities as well as low-income populations frequently have higher rates of disease, poorer health outcomes, fewer treatment options, and decreased access to care. Compared to the rest of the population, they are less likely to have health insurance. The ACA will help reduce health disparities by improving healthcare access, increasing insurance coverage, increasing preventative services, and investing in chronic disease management.<sup>43</sup> In the Greater New Orleans Area, 40% of the population is African American, and 9% identify as being Hispanic or Latino of any race. Three and four tenths of a percent of the population is Asian, and less than 1% falls into the category of American Indian, Alaskan Native, Native Hawaiian or Other Pacific Islander. The ACA will help reduce health disparities for racial and ethnic minorities that collectively, make up over 50% of the population of the Greater New Orleans area.

#### *Public Hospital and Specialty Care*

As more people have insurance coverage, safety net hospitals expect to have an increased demand for specialty care services. Currently, Interim LSU Hospital (ILH) provides the majority of specialty care for low-income patients although there is limited capacity for some specialty care services at some clinics in the area. The public hospital system will most likely continue to be the provider of choice for the uninsured, although the financing for it will change as Medicaid DSH payments decrease each year. The decrease in DSH funding will be



offset by the increase in revenue from those with insurance coverage, however, if Louisiana does not participate in the Medicaid expansion, then New Orleans will be faced with decreasing DSH payments, but few new revenue sources.

## Methods for Financing Safety Net Systems: An Analysis of Existing Models

In order to evaluate potential methods for financing a sustainable safety net system in New Orleans, the New Orleans Health Department conducted an analysis on a collection of currently operating model systems in other cities and states across the country. These programs have a common goal of providing care for the uninsured (typically the “working poor”, or those residents who are not able to afford private insurance but are also ineligible for public programs such as Medicaid or Medicare)—however; the mechanisms for funding this care vary considerably.

The analysis includes models that vary widely in terms of size and organization. Some of them are statewide programs, but most are organized at the city or county level. A variety of regions are represented, with some programs covering large urban areas and others operating in more rural regions. Some of the programs are relatively young, while others have been operating for decades.

### *Funding Models*

There is a large degree of heterogeneity in terms of funding structure. We found nine distinct types of models among the seventeen programs that were analyzed. These funding structures include the following:

- **Multi-share Programs (Shared Responsibility Model).** Members contribute to the cost of their care through premium payments, which are determined on a sliding scale basis based on income. Contributions are also made from other sources, including employers, providers, the state and federal government, and the county or city. The relative contributions of these participants vary between programs.
- **Subsidized Access Programs.** Designated federal, state, and city funds, along with contributions from philanthropic grants and donated care from hospitals and physicians are combined to provide care for the uninsured for little or no cost to the patient.
- **Dedicated Tax Programs.** City or county taxes are levied expressly for the purpose providing for care for the indigent, and the bulk of safety net care is funded through these taxes.
- **Hospital System Models.** A single large, centralized hospital system provides safety net care through the hospital and its associated community centers. This

uncompensated care is at least partially offset by federal and state funding and grants.

- **Financial Assistance Programs.** Members pay for services as they are accessed, with payments being made on a monthly basis according to an income-adjusted sliding scale. Total payments are capped, and county, state, or federal funds are used to cover the portion of costs not covered by the members.
- **Subsidized Insurance Plans.** Federal, state, and city funds are utilized to purchase insurance plans or provide insurance-type products for the otherwise uninsured. These products are often purchased through private payers.
- **1115 Demonstration Projects.** Portions of Medicaid funds are set aside to expand coverage for the uninsured. Many of these focus on expanding access to primary care, and these projects often involve implementing innovative payment models.
- **Donated Care Programs.** The bulk of safety net care is provided primarily through physicians and hospitals agreeing to donate their services to provide a certain amount of free care to uninsured patients.
- **Hospital Funded Models.** Local hospitals contribute funds to enroll patients into primary care programs, with the aim of decreasing their costs by avoiding uncompensated hospitalizations in the future.

#### *Eligibility and Enrollment*

All of these programs target those who are ineligible for public coverage through Medicare or Medicaid but are unable to afford private insurance. Maximum income eligibility requirements range between approximately 100% to 500% FPL, with most programs between 100% to 275% FPL. Most programs require enrollees to be current, permanent residents of the relevant city or county. However, requirements concerning recent immigrants vary, with some programs requiring U.S. citizenship, some requiring U.S. citizenship or eligible immigration status, and some enrolling patients regardless of immigration status. The number of enrolled patients varies widely between programs, with the smallest programs covering about 1,500 members and the largest covering as much as 55,000 members at any given time.

#### *Costs and Benefits*

On a per member per month (PMPM) basis, costs for these programs range from about \$135 PMPM to \$276 PMPM. As expected, the programs that offer more comprehensive benefits and include hospitalizations and emergency room visits tend to be at the upper end of the cost spectrum, while those with more limited benefits are at the lower end. Additionally, PMPM values are often calculated as net of patient contribution—therefore, the programs with higher levels of member cost sharing tend to show lower PMPM values. Notably, the programs that do not offer hospital care often rely on the hospitals donating care or patients contributing in various degrees to the cost of hospitalization.

#### *Member Contributions*

Most of these programs require some type of member contribution for care, but the type and degree of cost sharing varies widely. Many require patient co-pays for medications, outpa-

tient visits, and hospitalizations. Pharmacy co-pays are typically in the \$1-\$5 range, office visits are typically in the \$15 - \$25 range, and hospitalizations are typically in the greater than \$25 range. Some programs assess co-pays according to a sliding scale. Several programs require monthly premiums in addition to (or in lieu of) co-pays. These are typically assessed on a sliding scale, and tend to range from \$25 to \$85.

In the financial assistance type models, the patient contribution depends on the level of utilization, with patients being required to make income-adjusted monthly payments to pay down their bills as they are accrued. Similarly, some programs require up-front cash payments at the time of clinic visit or hospitalization in order to receive service. These payments can be quite high (\$400 per day of hospitalization, or 35% of Medicare reimbursement for outpatient services), and non-compliant patients face disenrollment from the program. In the employer sponsored sharing plans, monthly member contributions are matched/supplemented by contributions from the employer and the city or state.

#### *Outcomes*

Some metrics used to evaluate the success of safety net programs include the percentage of uninsured residents that are covered by the program, the number of emergency room visits and/or hospitalizations for members, and the cost savings found by effective utilization of primary care. Programs can also be evaluated in terms of the burden placed on local tax funds, and on the relative level of dependence on state or federal funding streams.

As mentioned above, the programs vary widely in terms of scale, with some consisting of 1,000 – 1,500 members—and therefore covering only a small fraction of the uninsured population—and others covering large portions of local uninsured population. Several programs (Denver, St. Louis, San Antonio, Detroit, and Austin) were able to enroll between 10% and 25% of the targeted population, while other cities, such as San Francisco, California and Flint, Michigan were able to cover more than half of the uninsured population.

Many of the programs were able to demonstrate reduction in ER utilization and/or hospitalizations for members, relative either to regional statistics before the program inception, or to non-members in the region, or to national Medicaid averages. Several programs also showed significant increases in primary care utilization. There were other successful outcomes in terms of cost-savings. A program in Detroit showed a decrease in uncompensated care costs by 42%. In Minnesota, it was estimated that every \$1 invested into the safety net resulted in a cost savings for the community of \$3. Additionally, it was demonstrated that many of these programs are cheaper on a PMPM basis than it would be to cover these individuals with public or private insurance (cost reductions ranging from about 23% to 50%).

#### *Local Constraints on Funding*

The goal in analyzing these systems was to explore ways to design and fund a system that could be financially sustainable without placing an undue burden on a limited local tax base, and without relying heavily on state and federal funding streams. The funding opportunities that exist outside of these sources include: local employers, member contributions, hospitals and other providers, and philanthropic donations.

Portico Healthnet is an example of a system that utilizes exclusively non-public funding sources, and that does not rely heavily on donated care and philanthropic funding sources. It is funded exclusively by annual contributions from participating local hospitals. This system has demonstrated several successful outcomes—in particular, they were able to show a cost savings of \$3 for every \$1 invested into the system. However, the program is very small, and covers only a small fraction of the area’s uninsured.

We were not able to find a system that was able to use exclusively non-public funding streams to cover significant portions of the population. However, programs that are able to utilize local sources such as members and employers are able to significantly decrease their dependence on public funds. For example, Carelink (San Antonio) is able to cover about 50,000 enrollees in a model that derives a quarter of its funding from member payments. San Francisco (Healthy San Francisco) has been very successful in covering a large portion (80%) of its uninsured population in a similar type of multi-share program—however; the program still depends to a large degree on local tax dollars.

Other programs have had similar successes in utilizing innovative funding models to decrease dependence on public funds, but have not achieved the scale of the programs in San Antonio and San Francisco. These include: Access Health, Access to Healthcare Network, Seton Care Plus, and TexHealth Central Texas. Access Health relies on contributions from employees, employers, and city funds. The program depends on an interesting financing arrangement whereby the employer contribution is filtered through the state and used to draw down matching DSH funds. These DSH funds are used as the city’s contribution to the program. Access to Healthcare Network relies heavily on upfront cash payments for funding. Seton Care Plus is a three-share program between the enrollees, the Seton Health System, and philanthropic grants.

New Orleans is particularly constrained in that local tax dollar support for safety net care is extremely limited, or non-existent, at the current time. Furthermore, dependence on state and federal funding streams has left the safety net system vulnerable to budgetary changes and policy shifts. However, it is possible that the city or parish could adapt aspects of some of these innovative funding models to create a system that is sustainable without being reliant on public funds. This might entail taking a hospital funded type network such as Portico Healthnet and supplementing it with enrollee and employer contributions, and possibly leveraging these funds to draw down matching DSH dollars, to scale it up to cover a large portion of the population.

In 2007, a coalition of local healthcare organizations (The Coalition of Leaders for Louisiana Healthcare (“COLLAH”) formed with the goal of redesigning the safety net system in a way that would support delivery of care through a network of community health centers. The plan involved diverting a certain portion of the region’s DSH funding towards creating a new insurance product (“RightCare”) for residents at or below 200% of the FPL. A variety of benefit options were set forth, ranging from a basic primary care and prescription benefits to a full coverage option. The estimated costs for the program ran from \$45 PMPM (\$36 million annually) for the primary care benefits model to \$216 PMPM (\$174 million annually) for the more comprehensive benefits model. Although the program would rely initially on DSH

funding, it included a plan to eventually implement a “Connector” model that would utilize contributions from state subsidies, federal funds, and individual and employer contributions to expand coverage outside of the designated income requirements. A comprehensive plan was developed by a non-governmental coalition and a report was produced that included input from two independent auditors; however the program was never adopted by the state.

An analysis of model safety programs has shown that there are many ways to create sustainable safety net systems. Many rely heavily on public funding, but some have found innovative ways to pay for care using contributions from patients, employers, and providers. Many of these programs are small, and relatively new, but it is possible that this type of model can be scaled up to cover a significant portion of the region’s uninsured.

## Potential Resources to Leverage for Implementation

### *New Orleans Health Data Mapper*

Developed by the Robert Graham Center, the New Orleans Health Data Mapper, an online, interactive data visualization tool, is designed to allow policymakers and planners to better understand and plan for optimal access to outpatient primary care in Greater New Orleans. Built on the HealthLandscape platform, it incorporates population, demographic, and healthcare utilization to reveal areas of suboptimal, adequate, and potential surplus service delivery. Data sources include PCASG, UDS, 504HealthNet, the American Community Survey, ESRI and Centers for Disease Control and Prevention (CDC). Users can also view the locations of healthcare providers in the context of geopolitical boundaries, including the New Orleans City Council Districts. The New Orleans Mapper can be accessed here: [www.udsmapper.org/nolamapper](http://www.udsmapper.org/nolamapper).

With its highly interactive tools, the HealthLandscape platform allows users to overlay data layers to better understand how the people who live in an area may be affected by conditions measured by separate organizations or even data that are collected for two different geographies. In the New Orleans Mapper, users can overlay data from the catchment areas of a health organization that participated in PCASG with information from the CDC regarding where there is a high percentage of adults with diagnosed diabetes. Even though these data are maintained by two separate entities at two separate geographies, users can see how the data interact in their neighborhood of interest. Similarly, users can overlay catchment areas with data from the UDS Mapper and turn on the locations of health organizations to better understand areas with high need and few health resources compared to areas of high need with many health resources.

On their own, the PCASG data are powerful in their representation of the areas served by recipients of that funding. Users can look at catchment areas that are based on 100% of the patients who sought services from that organization or adjust the threshold to include only the

core areas served by those organizations. Catchment areas of multiple health organizations can be turned on at any time allowing the user to visualize where catchment areas overlap.

The New Orleans Mapper is a powerful tool for health planners and policy makers. Users can better plan where additional health resources may be needed, and where they may not be as helpful. Users can target health interventions and outcomes based on where users are not using services or areas that may have need for targeted outreach or intervention.

## Acknowledgements

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Jennifer Rankin, PhD, Robert Graham Center

Susan Todd, MPAff, US Department of Health and Human Services, Assistant Secretary for Planning and Evaluation

Lindsay Ordower, 504HealthNet

### Task Force

The Health Access Planning Project Task Force consisted of a variety of high level community leaders across a variety of sectors. The Task Force met three times in a six month period to discuss goals, review progress, and develop policy recommendations. Task Force members include:

Co-Chair, Dr. Karen DeSalvo, Health Commissioner, City of New Orleans

Co-Chair, Dr. Anjum Khurshid, Louisiana Public Health Institute

Leah Berger, Director, Tulane School of Medicine Office of Community Affairs and Health Policy

Julie Catellier, Director, Southeast Louisiana Veterans Health Care System

Jonathan Chapman, Executive Director, Louisiana Primary Care Association

Gerrelda Davis, Director, Bureau of Primary Care, Louisiana Department of Health and Hospitals

Patrick Dobard, Superintendent, Recovery School District

Bill Gilchrist, Director of Place-Based Development, City of New Orleans

Judge Calvin Johnson, Executive Director, Metropolitan Human Services District

JT Lane, Assistant Secretary for Public Health, Louisiana Department of Health and Hospitals

Dr. Norman McSwain, President, Orleans Parish Medical Society

Lindsay Ordower, Executive Director, 504HealthNet

Paul Salles, CEO, Metropolitan Hospital Council of New Orleans

Timolynn Sams, Executive Director, Neighborhood Partnership Network

Elizabeth Scheer, Vice President, Health, Baptist Community Ministries

# Appendix A

## Methodology

### Data Sources & Strategies used for data analysis

#### **Healthcare Delivery Sites (Access Points)**

##### *504 Healthnet Data*

Locations of healthcare access points were obtained from 504 HealthNet. Locations were provided for 2005, 2010 and 2012. The maps created for this document include the 2010 access points; the online, interactive maps use current (2012) access point locations.

#### **Healthcare Utilization Data**

##### *PCASG Data*

Counts of patients by ZIP Code were obtained from the Primary Care Access and Stabilization Grant (PCASG) data collected and maintained by the Louisiana Public Health Institute (LPHI). Data were requested for these geographies for calendar year 2010 to match an existing data source, but other data extracts were provided as well. Once received, all data were converted from ZIP Codes to ZIP Code Tabulation Areas (ZCTA) using the same crosswalk used for the existing data source. Data from providers with fewer than 10 patients in a ZCTA were suppressed. The remaining data were then mapped using ArcInfo software from ESRI.

The following PCASG data extracts were obtained from LPHI:

- Counts of patients by ZIP Code for the entire program over the full project period, September 2007-September 2011;

- Counts of patients by ZIP Code for the entire program for each year of the program (based on program year, Sept- Sept);

- Counts of patients by ZIP Code for each participating organization over the full project period;

- Counts of patients by ZIP Code for the entire program for calendar year 2010;

- Counts of patients by ZIP Code for each participating organization for calendar year 2010; and

- Counts of patients by insurance type by ZIP Code for the entire program over the full project period, September 2007-September 2011.

#### **UDS Mapper Data**

The UDS Mapper is a publicly available, online mapping and data portal based upon data from the Uniform Data System (UDS). The UDS data used in this application are processed by John Snow, Inc. (JSI), under contract with the Health Resources and Services Administration (HRSA) for the management of all data associated with the annual UDS reporting requirements by health center program grantees. More information about this dataset can be found at <http://www.bphc.hrsa.gov/healthcenterdatastatistics/index.html>. Data on patients served were pulled from the UDS Mapper by ZCTA for the four-parish study area. Currently, the UDS Mapper displays health center program grantee data from calendar year 2010. In



the UDS dataset, JSI suppresses reporting of data by ZCTA from providers with fewer than 11 patients in that ZCTA. Accessed on February 10, 2012, from [www.udsmapper.org](http://www.udsmapper.org), ZCTAs were selected if they fell within the parish lines. For these four parishes, the ZCTAs respected parish lines so there was no overlap between or outside of the study area.

Additional catchment area data were analyzed for each of the five health center grantees that have locations within the four-parish study area. These data were not publicly available on the UDS Mapper on the date that the rest of the UDS Mapper data were accessed but will be available in the summer of 2012.

Finally an analysis of similarly sized Metropolitan Statistical Areas was conducted using the UDS Mapper data. For this analysis, MSA ranks and population sizes were obtained from [http://en.wikipedia.org/wiki/Table\\_of\\_United\\_States\\_Metropolitan\\_Statistical\\_Areas](http://en.wikipedia.org/wiki/Table_of_United_States_Metropolitan_Statistical_Areas). The TIGER Line Files for Metropolitan Statistical Areas were downloaded from the US Census Bureau. Using ArcGIS, MSAs were compared to ZCTAs, and all ZCTAs were selected within each MSA to obtain a list of MSAs for analysis in UDS Mapper. All data and geographic files for this analysis were accessed on March 9, 2012.

### **Aggregated Medicaid Claims Data, State of Louisiana**

Data for Louisiana Medicaid beneficiaries were obtained HHS for outpatient claims for providers who practice in the four parish area of the study, Jefferson, Orleans, Plaquemines, and St. Bernard. The sample was limited to claims by providers who practice primary care, obstetrics and gynecology, oral health and behavioral health. These specialties were obtained by comparing provider NPI number on each claim to the specialties listed by each provider in their NPI file. A list of the specialties by code that were included in the dataset can be found in Appendix B. Once limited to these providers, claims were extracted for each provider, and a count of unique patients for each provider was produced. These counts were categorized into counts of patients by ZIP Code. Once received, all data were converted from ZIP Codes to ZIP Code Tabulation Areas (ZCTA) using the same crosswalk used for the existing data source. Data from providers with fewer than 10 patients in a ZCTA were suppressed. The remaining data were then mapped using ArcInfo software from ESRI.

### **Louisiana Medicare Data**

Data for Louisiana Medicare beneficiaries were obtained from HHS for outpatient claims for providers who practice in the four parish area of the study, Jefferson, Orleans, Plaquemines, and St. Bernard. The request was limited to claims by providers who practice primary care, obstetrics and gynecology, oral health and behavioral health. These specialties were obtained by comparing provider NPI number on each claim to the specialties listed by each provider in their NPI file. A list of the specialties by code that were included in the dataset can be found in Appendix B. Once limited to these providers, claims were extracted for each provider, and a count of unique patients for each provider was produced. These counts were categorized into counts of patients by ZIP Code. Once received, all data were converted from ZIP Codes to ZIP Code Tabulation Areas (ZCTA) using the same crosswalk used for the existing data source. Data from providers with fewer than 10 patients in a ZCTA were suppressed. The remaining data were then mapped using ArcInfo software from ESRI.

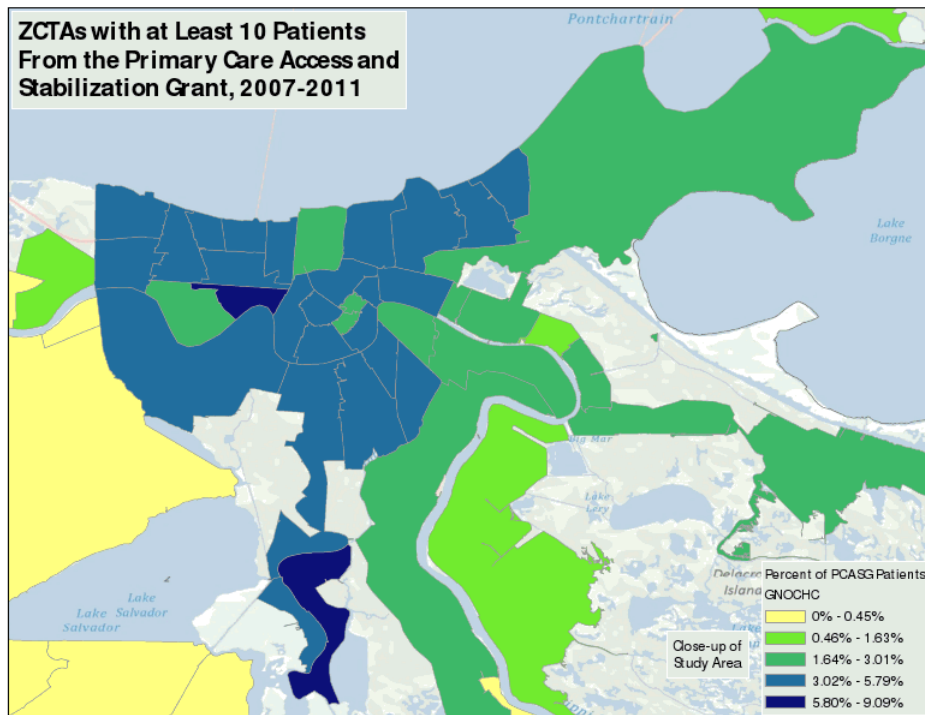
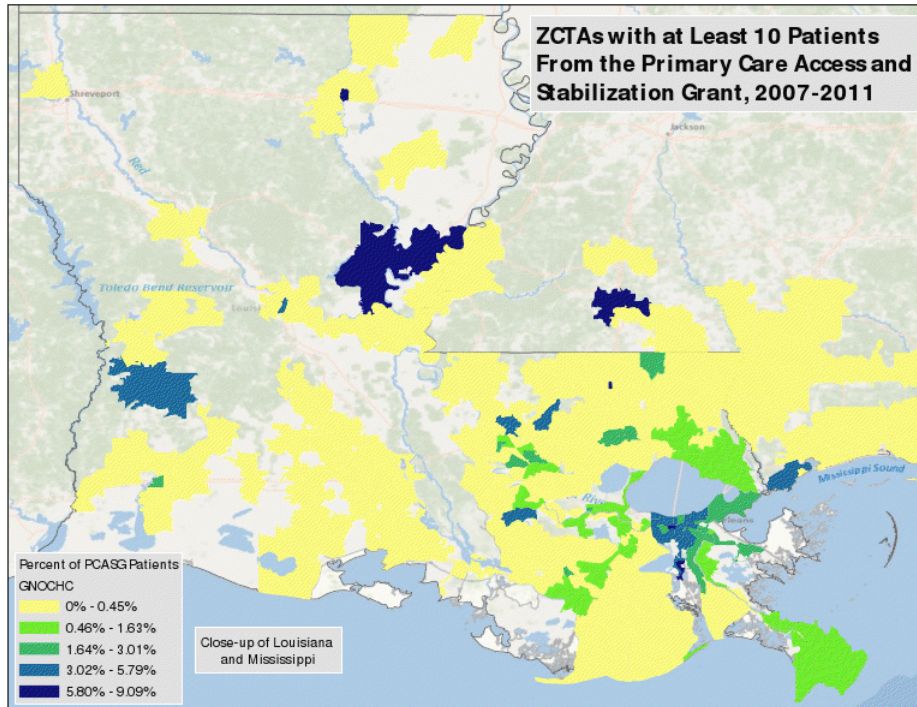
## Appendix B

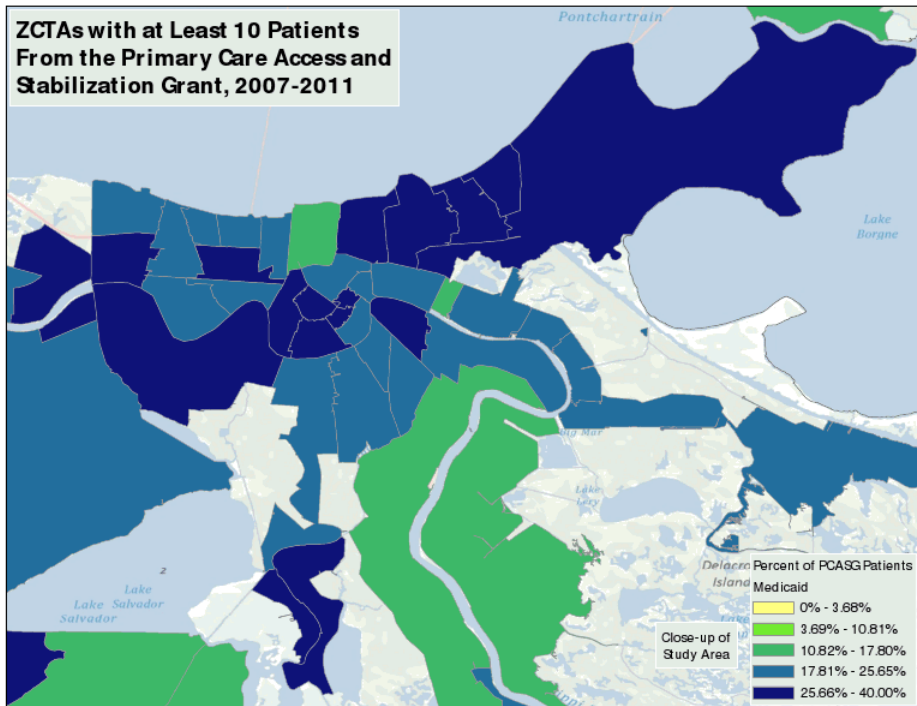
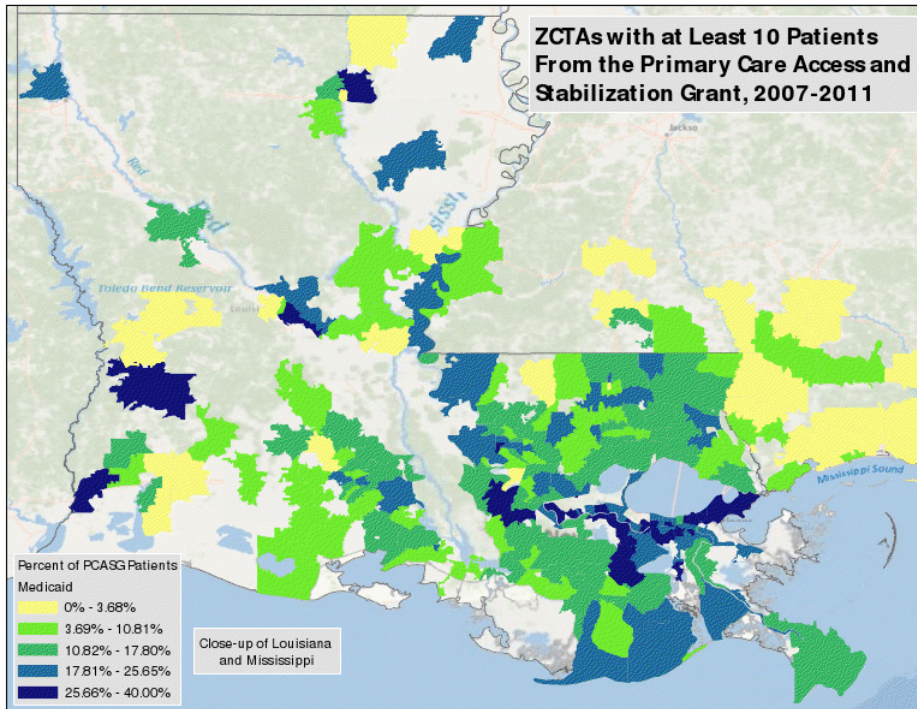
The following NPI Taxonomy codes were used to select claims from the Louisiana Medicaid and Medicare Datasets. For the analysis, claims from the neonatal nurse practitioner were removed.

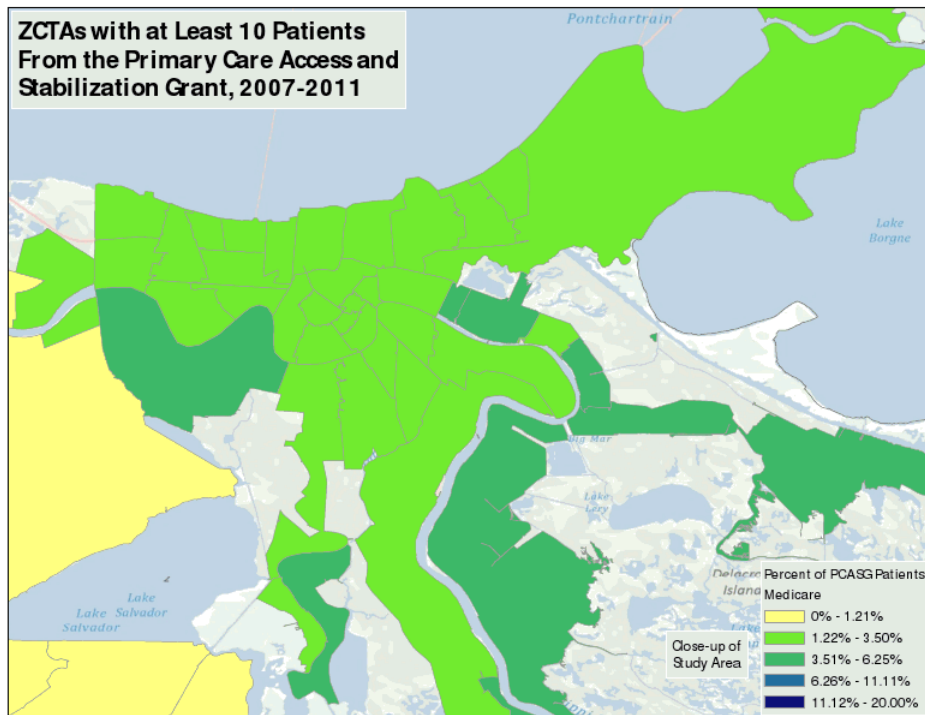
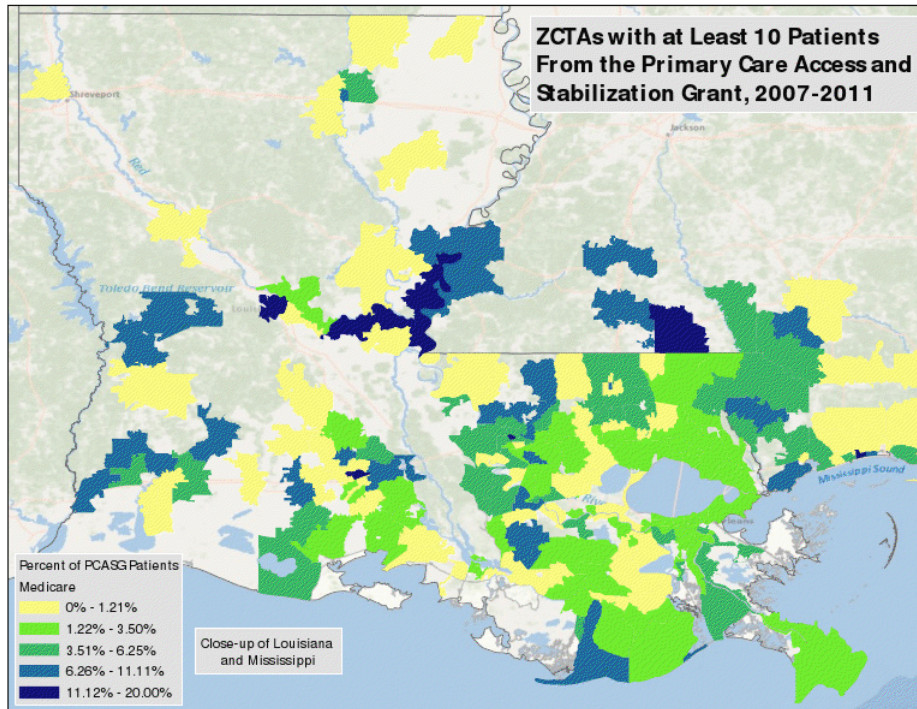
Taxonomy Code	Description	Code Used For Analysis (Medicaid)
207Q00000X	Family Medicine Physician	Primary Care
208D00000X	General Practice Physician	Primary Care
207QA0401X	Addiction Medicine Physician	n/a
207QA0000X	Adolescent Medicine Physician	Primary Care
207QA0505X	Adult Medicine Physician	Primary Care
207QB0002X	Bariatric Medicine Physician	n/a
207QG0300X	Geriatric Medicine Physician	Primary Care
207QH0002X	Hospice and Palliative Medicine Physician	n/a
207QS1201X	Sleep Medicine Physician	n/a
207QS0010X	Sports Medicine Physician	Primary Care
207R00000X	Internal Medicine Physician	Primary Care
207RA0000X	Adolescent Medicine Physician	Primary Care
207RG0300X	Geriatric Medicine Physician	Primary Care
208000000X	Pediatrics Physician	
2080A0000X	Adolescent (Pediatrics) Physician	
363L00000X	Nurse Practitioner	Primary Care
363LA2100X	Acute Care Nurse Practitioner	Primary Care
363LA2200X	Adult Health Nurse Practitioner	Primary Care
363LC1500X	Community Health Nurse Practitioner	n/a
363LF0000X	Family Nurse Practitioner	Primary Care
363LG0600X	Gerontology Nurse Practitioner	n/a
363LN0000X	Neonatal Nurse Practitioner	Included in raw dataset; not included in analysis
363LX0001X	Obstetrics & Gynecology Nurse Practitioner	Obstetrics/ Gynecology
363LX0106X	Occupational Health Nurse Practitioner	n/a
363LP0200X	Pediatrics Nurse Practitioner	Primary Care
363LP1700X	Perinatal Nurse Practitioner	n/a
363LP2300X	Primary Care Nurse Practitioner	Primary Care
363LP0808X	Psychiatric/Mental Health Nurse Practitioner	Behavioral Health
363LS0200X	School Nurse Practitioner	Primary Care
363LW0102X	Women's Health Nurse Practitioner	Primary Care
207V00000X	Obstetrics & Gynecology Physician	Obstetrics/ Gynecology
207VB0002X	Bariatric Medicine Physician	n/a
207VG0400X	Gynecology Physician	Obstetrics/ Gynecology
207VM0101X	Maternal & Fetal Medicine Physician	Obstetrics/ Gynecology
207VX0000X	Obstetrics Physician	Obstetrics/ Gynecology
207VE0102X	Reproductive Endocrinology Physician	Obstetrics/ Gynecology
176B00000X	Midwife	n/a
175M00000X	Midwife, Lay	n/a
126800000X	Dental Assistant	n/a
124Q00000X	Dental Hygienist	n/a
126900000X	Dental Laboratory Technician	n/a
122300000X	Dentist	Oral Health

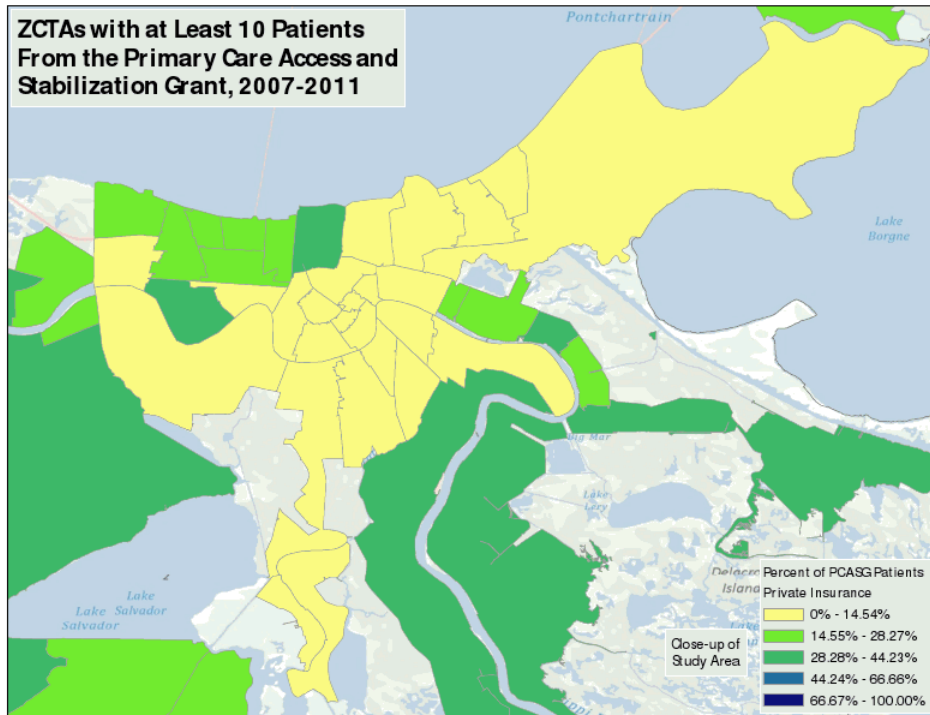
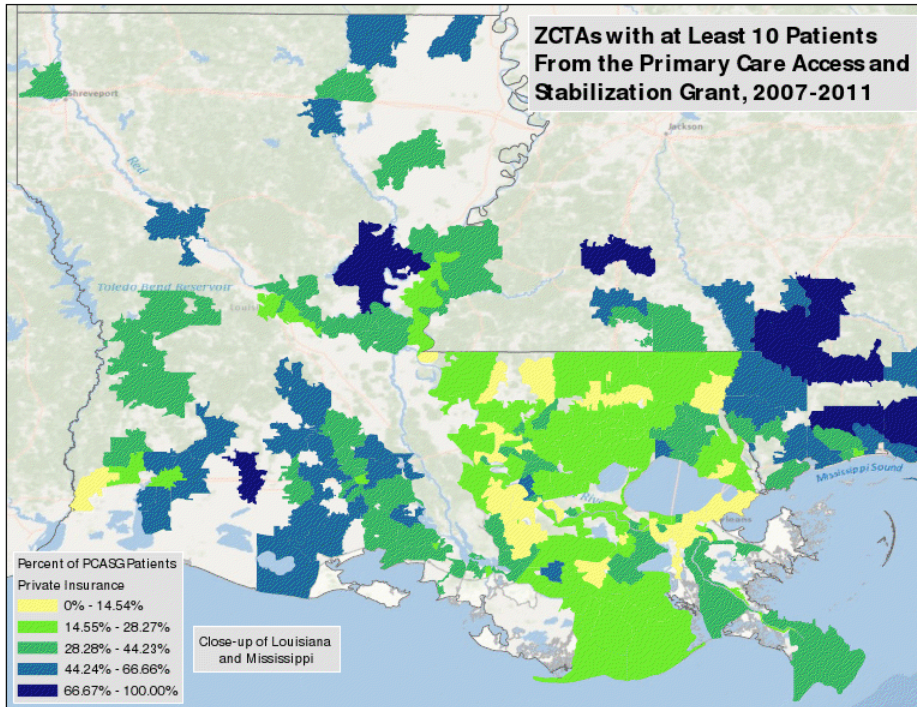
1223D0001X	Dentist, Public Health	n/a
1223E0200X	Dentist, Endodontics	Oral Health
1223G0001X	Dentist, General Practice	Oral Health
1223P0106X	Dentist, Oral and Maxillofacial Pathology	Oral Health
1223X0008X	Dentist, Oral and Maxillofacial Radiology	n/a
1223S0112X	Dentist, Oral and Maxillofacial Surgery	Oral Health
1223X0400X	Dentist, Orthodontics and Dentofacial Orthopedics	Oral Health
1223P0221X	Dentist, Pediatric Dentistry	Oral Health
1223P0300X	Dentist, Periodontics	Oral Health
1223P0700X	Dentist, Prosthodontics	Oral Health
122400000X	Denturist	n/a
103K00000X	Behavioral Analyst	n/a
103G00000X	Clinical Neuropsychologist	Behavioral Health
103GC0700X	Clinical Neuropsychologist, Clinical	n/a
101Y00000X	Counselor	Behavioral Health
101YA0400X	Counselor, Addiction	Behavioral Health
101YM0800X	Counselor, Mental Health	Behavioral Health
101YP1600X	Counselor, Pastoral	n/a
101YP2500X	Counselor, Professional	Behavioral Health
101YS0200X	Counselor, School	n/a
106H00000X	Marriage & Family Therapist	Behavioral Health
102X00000X	Poetry Therapist	n/a
102L00000X	Psychoanalyst	n/a
103T00000X	Psychologist	Behavioral Health
103TA0400X	Psychologist, Addiction	n/a
103TA0700X	Psychologist, Adult Development and Aging	n/a
103TC0700X	Psychologist, Clinical	Behavioral Health
103TC2200X	Psychologist, Clinical Child and Adolescent	Behavioral Health
103TB0200X	Psychologist, Cognitive and Behavioral	Behavioral Health
103TC1900X	Psychologist, Counseling	Behavioral Health
103TE1000X	Psychologist, Educational	n/a
103TE1100X	Psychologist, Exercise and Sports	n/a
103TF0000X	Psychologist, Family	n/a
103TF0200X	Psychologist, Forensic	n/a
103TP2701X	Psychologist, Group Psychotherapy	n/a
103TH0004X	Psychologist, Health	n/a
103TH0100X	Psychologist, Health Service	n/a
103TM1700X	Psychologist, Men and Masculinity	n/a
103TM1800X	Psychologist, Mental Retardation and Developmental Disabilities	Behavioral Health
103TP0016X	Psychologist, Prescribing (Medical)	Behavioral Health
103TP0814X	Psychologist, Psychoanalysis	n/a
103TP2700X	Psychologist, Psychotherapy	n/a
103TRO400X	Psychologist, Rehabilitation	n/a
103TS0200X	Psychologist, School	Behavioral Health
103TW0100X	Psychologist, Women	n/a
104100000X	Social Worker	Behavioral Health
1041C0700X	Social Worker, Clinical	Behavioral Health
1041S0200X	Social Worker, School	Behavioral Health

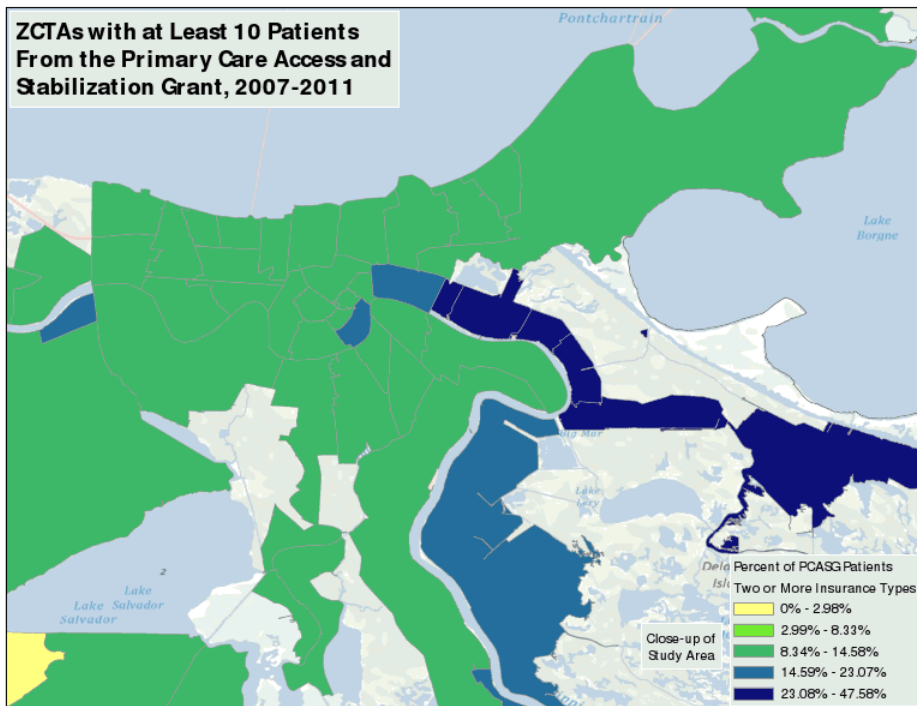
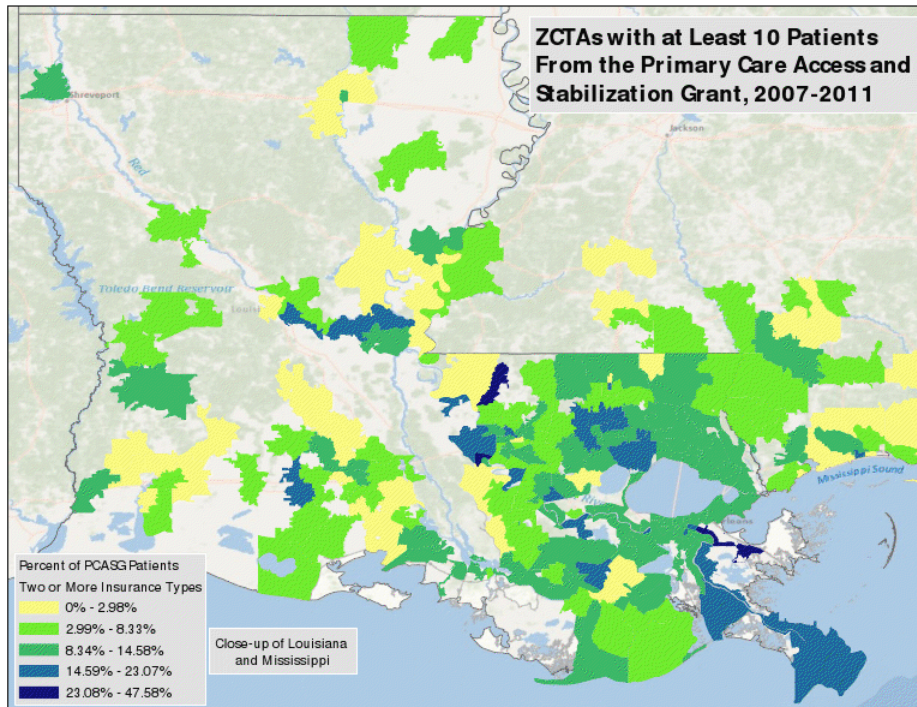
# Appendix C



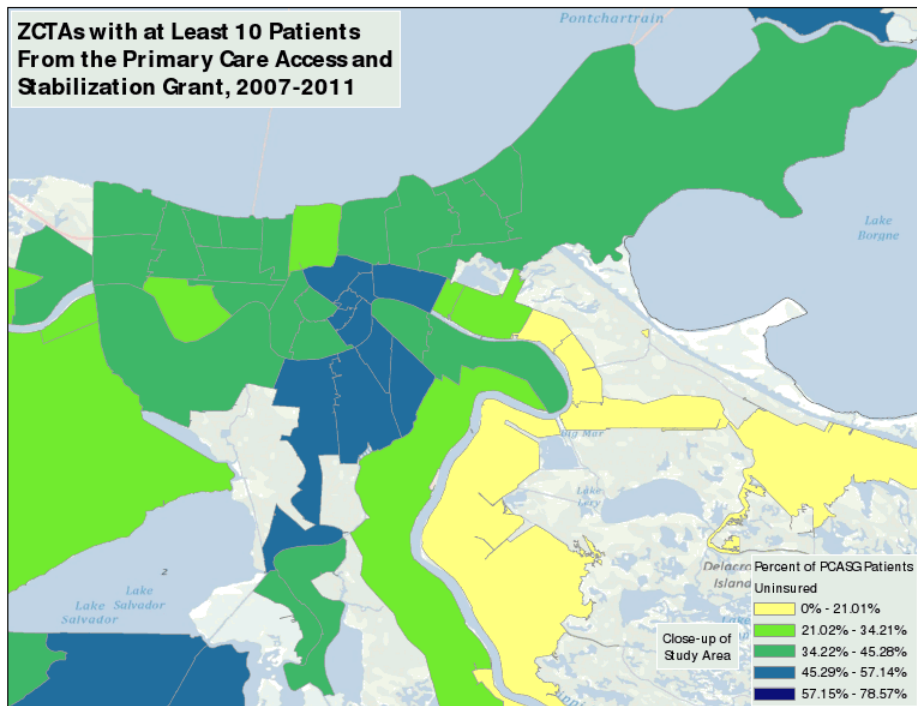
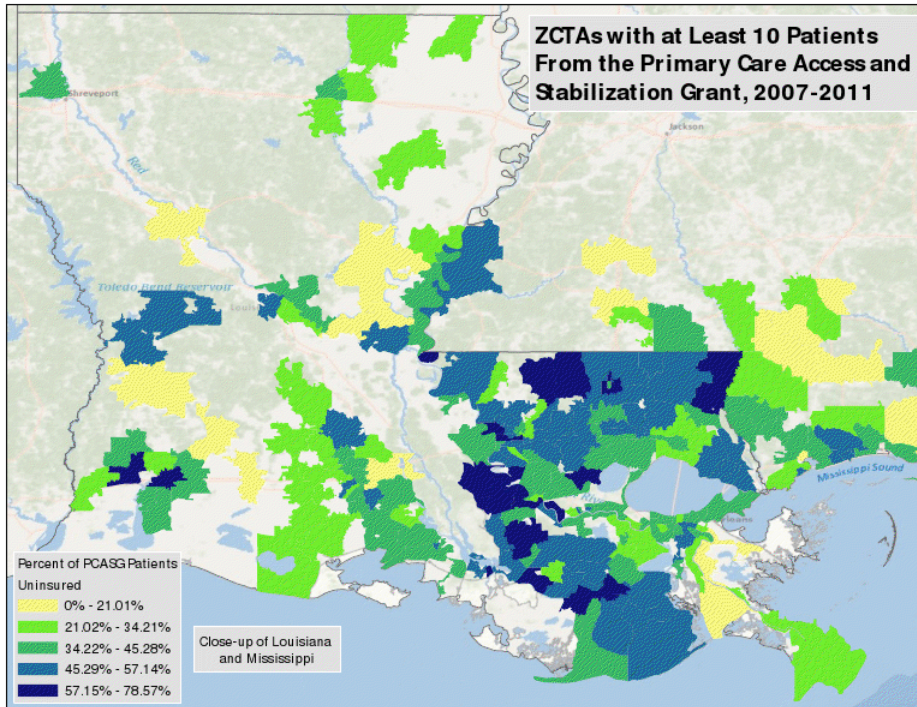


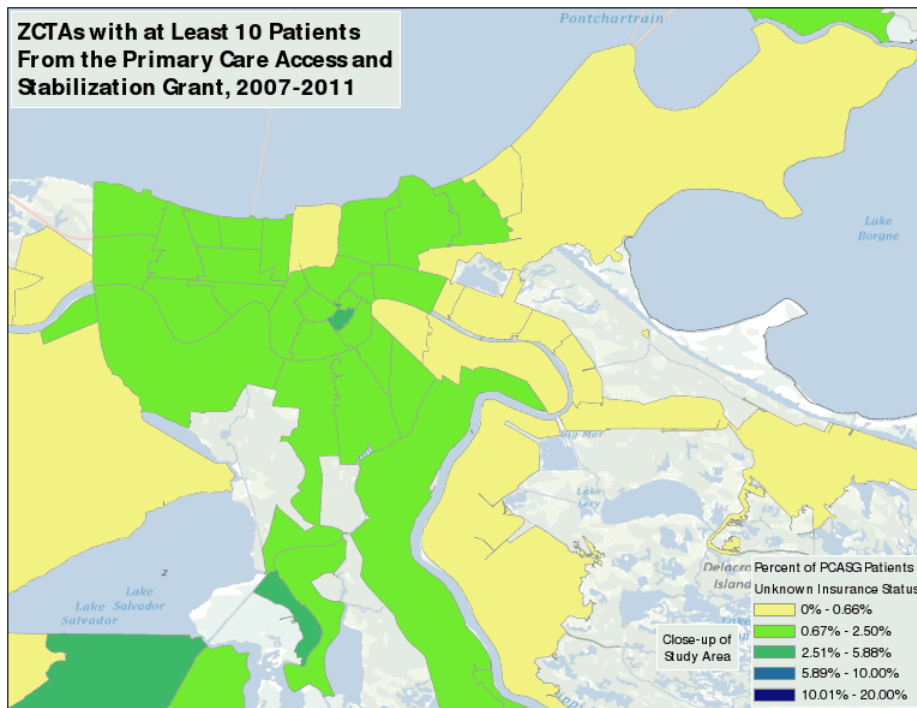
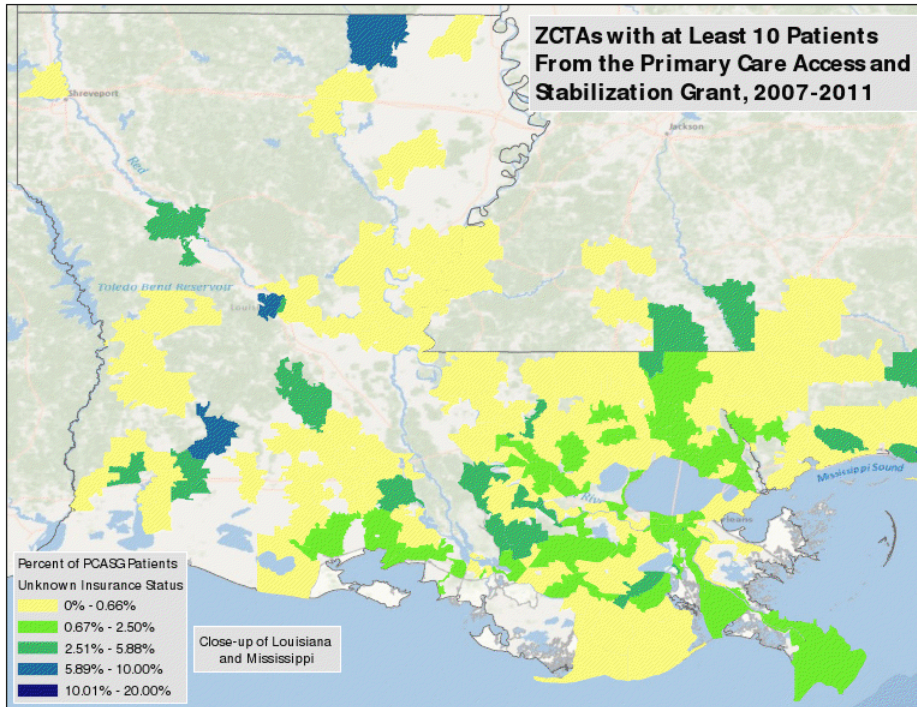




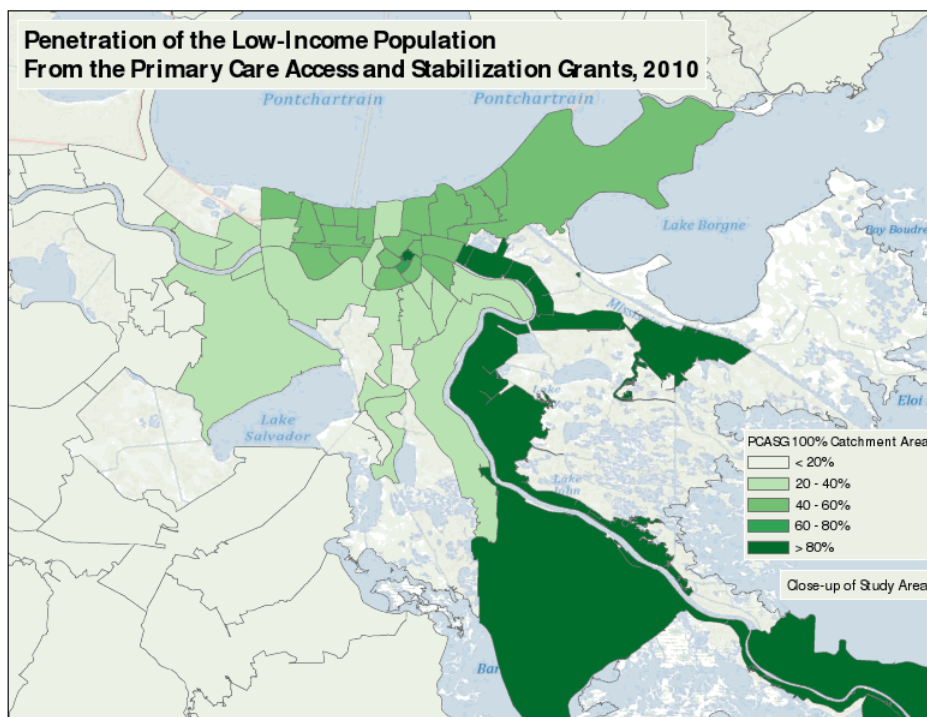
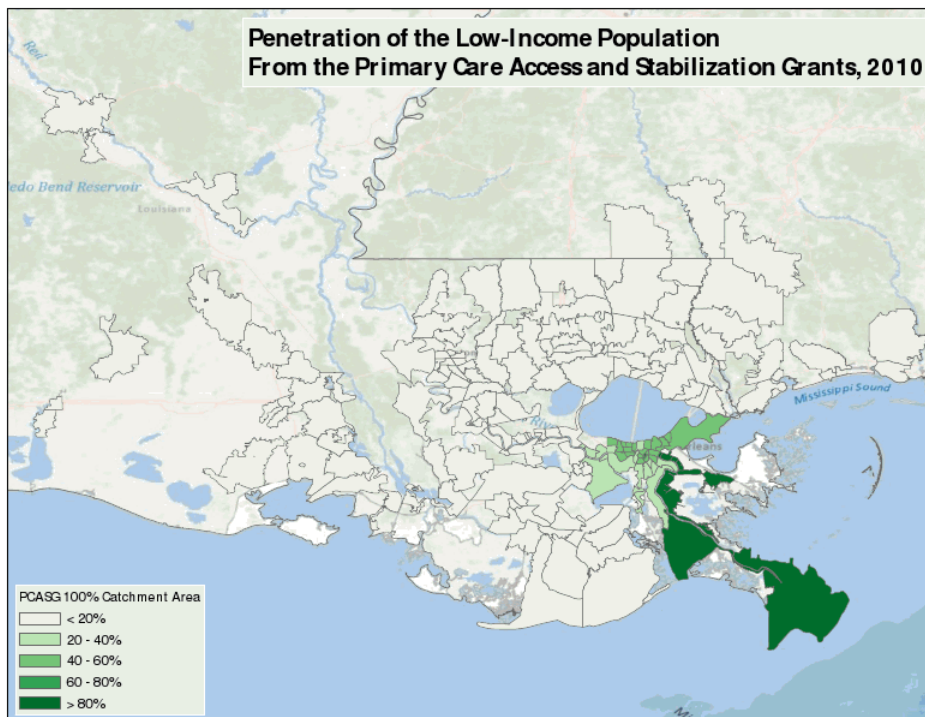


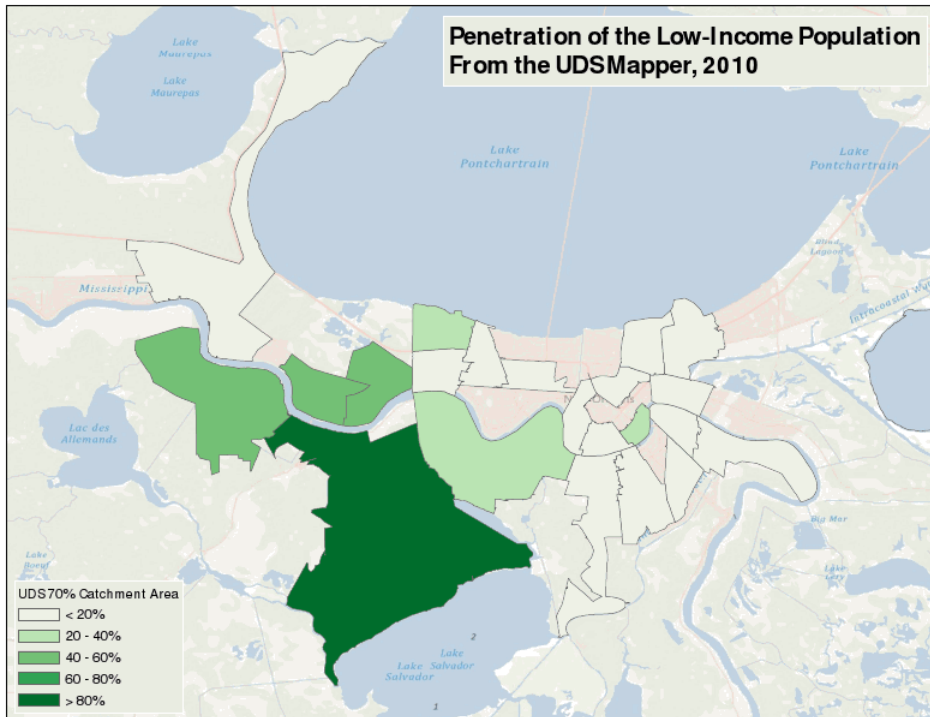
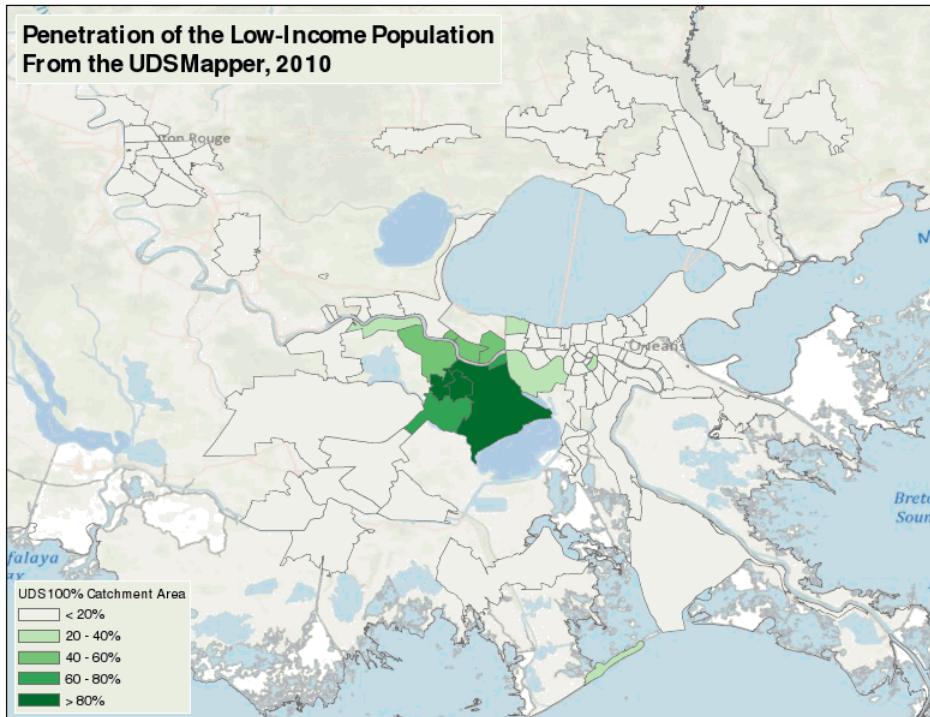






# Appendix D





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