

UNDERSTANDING ACCESS TO HEALTH CARE: FORSYTH COUNTY, NC 2014



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Forsyth Futures is a nonprofit collaborative of residents, organizations and institutions working together to address critical community issues. Established in 2006, the organization's mission is to put community knowledge to work by being an objective catalyst, connecting people, and serving as a convener.

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EXECUTIVE SUMMARY

With the implementation of the Affordable Care Act (ACA) health care in the United States is going through a transition. Understanding what primary health care resources are available in Forsyth County, and residents ability to access these resources can help community leaders plan for the transition. The purpose of the study *Understanding Access to Health Care*, is to provide an overview of health care resources and access to those resources before ACA was implemented. With support from HealthCare Access and the Kate B. Reynolds Charitable Trust Forsyth Futures conducted an objective assessment of access to health care in Forsyth County.

The *Understanding Access to Health Care* study focused on the following:

- ▮ An assessment of the current scope and utilization of health care in Forsyth County.
- ▮ The results of Forsyth Futures' Initiascape© study that identifies who is working to promote and develop the access to health care system and what our health care safety net looks like.
- ▮ Barriers to accessing and providing health care services.

FINDINGS

Forsyth Futures' analysis of stakeholder interviews, community program mapping and surveys yielded the following insights into the existing health care system and how residents are accessing care:

1. A LACK OF ADEQUATE INSURANCE COVERAGE

A lack of health insurance contributes to barriers in accessing health care resources. The number of adults without insurance increased from 2008 to 2012. With the most recent insurance data being from 2012, it is not yet clear how implementation of the Affordable Care Act will impact these numbers.

2. AFFORDABILITY OF HEALTH CARE

One of the primary barriers to receiving needed primary health care services was cost. This is true for not only those without health insurance, but was also expressed by those with health insurance. The increase in high deductible plans and high copays has caused even some with insurance to feel they can not afford needed health care services. This applies to doctor visits and procedures, as well as prescription medications.

3. SCARCE HEALTH CARE RESOURCES IN HIGH NEED AREAS

While Forsyth County has a large number of primary care practices and physicians, there is a designated Health Professional Shortage Area within Winston-Salem. This is in area that also has a high percentage of Medicaid beneficiaries and persons without access to a vehicle.

4. LACK OF ACCESS TO DENTAL & BEHAVIORAL HEALTH PROVIDERS

A common theme among interviews and focus groups was difficulty accessing dental and behavioral health providers, particularly for individuals that are publicly insured or uninsured.

5. BARRIERS TO PROVIDING CARE IN COMMUNITY CLINICS

Forsyth County has a number of community clinics working to increase access to persons who are under- or uninsured. However, a variety of challenges exist to providing this care including coordination of care, complexity of care, scope of services and volume.

6. NAVIGATION OF THE HEALTH CARE SYSTEM

Through focus groups and interviews many residents expressed how difficult it was to navigate the health care system. A lack of understanding of the health care system limits peoples ability to be proactive about their health.

7. USE OF THE EMERGENCY DEPARTMENT FOR PRIMARY CARE TREATABLE OR PREVENTABLE CONDITIONS

Almost half of emergency department visits in Forsyth County are for conditions that could have been treated or prevented with timely primary care. In many cases this does not indicate an abuse of the system, but rather the existance of barriers that keep residents from accessing primary care resources including lack of insurance, primary care clinics hours of operation, and cost.

OPPORTUNITIES FOR COMMUNITY ACTION

Based on the results of the study, Forsyth Futures identified the following eight opportunities for community action.

OPPORTUNITIES FOR COMMUNITY ACTION

Convene Community Clinics & Reduced Cost Pharmacies

Investigate the Use of Paramedicine or Mobile Clinics in Health Professional Shortage Areas

Encourage the Expansion/Establishment of School- and Work-Based Clinics

Increase the Availability of After Hours Primary Care

Explore Feasibility of Locating a Primary Care Clinic Near Emergency Departments

Co-locate or Integrate Primary Care, Specialty Care, & Pharmacy Services

Increase Access to Trained Case Managers & Community Health Leaders

Design a Community Education Program to Increase Understanding of the Health Care System

INTRODUCTION

The ability to access primary health care resources is one piece of the equation needed to maintain community health. Oftentimes, without adequate access to and use of primary health care resources, health issues may become more serious, resulting in the need for a higher level of care that is more expensive.

The purpose of this study is to help the community understand how Forsyth County residents are accessing health care.

With the implementation of the Affordable Care Act, local communities have a need to better understand the availability and utilization of health care resources to plan for upcoming policy changes. This report is designed to deepen the understanding of health care resources in our community through a more in-depth examination of how people access health care. The population-wide data on Forsyth County health care resources can also assist safety net organizations with planning where to place resources in the future and provide a baseline for tracking changes as health care reform is implemented.

This study provides information on the number of uninsured residents, availability of medical practitioners and facilities and the use of local hospitals and emergency departments. The report includes:

1. An assessment of the current scope and utilization of health care services.
2. The results of Forsyth Futures' Initiascape© study that identifies who is working to promote and develop the access to health care system and what our health care safety net looks like.*
3. Barriers to accessing and providing health care services.

**An Initiascape© depicts the landscape of a community's initiatives addressing an issue.*

GOALS & OBJECTIVES

The main goal of the study *Understanding Access to Health Care* is to provide Forsyth County with knowledge of available health care resources and current utilization of those resources, as well as barriers to care and gaps in services. Forsyth Futures aims to accomplish this goal through the following objectives:

1. Collect and analyze data on indicators of access to health care.
2. Provide a definition of the safety net and overview of the current safety net structure in Forsyth.
3. Identify current resources increasing access to primary care services.

METHODOLOGY

Forsyth Futures used a variety of methodologies to provide a comprehensive picture of health care resources in Forsyth County. The Small Area Health Insurance Estimate from the U.S. Census Bureau was used to measure the trend of uninsured residents in Forsyth County. Local hospitals provided data used to understand the utilization of emergency departments within Forsyth County. Forsyth Futures conducted a series of interviews and focus groups in the community to gain an understanding of the challenges and barriers residents face when they try to access health care services.

Data Collection Methods

Interviews: Forsyth Futures' staff interviewed 16 individuals who were identified as community experts on access to primary health care services. This group included physicians, case managers, advocates, emergency response staff, health care administrators, health program volunteers, and a community representative. A second set of interviews took place with staff from 12 community clinics that provide free or reduced-cost services to under- and uninsured residents.

Focus Groups: The Forsyth Futures team conducted six focus groups with neighborhood associations, Sunday school classes, and other community groups to hear from consumers of health care services what barriers exist in accessing these services.* The majority of focus groups had about 10 participants. However a couple had less than five participants and one had about 30 participants.

Surveys: Forsyth Futures developed surveys to learn how community members are accessing healthcare, and what, if any, barriers they experience in accessing that care. Forsyth Futures distributed surveys to a diverse group of Forsyth County residents through a variety of outlets including community organizations, faith-based communities, community listservs, and the Forsyth Futures' website. In total, respondents completed 482 surveys. A complete copy of the survey is found in Appendix B.

The following compilation of research presents a picture of where the system is excelling and where there are gaps. This analysis forms the basis for the final recommendations.

**Forsyth Futures attempted to organize a Hispanic focus group of residents, but was unable to convene the group due to scheduling conflicts. This summer FaithHealthNC held four workshops in Winston-Salem for Hispanic/Latino people who seek health care as well as for those who provide it. To view results of those discussions, go to <http://www.faithhealthnc.org/francis-rivers/>.*

Access to Health Care Initiascape®

To gain a deeper understanding of programs currently working to increase access to health care services in Forsyth County, Forsyth Futures completed an Initiascape® study. Forsyth Futures developed the Initiascape® concept as an information tool that allows the community to analyze what programs are currently working on an initiative. The term Initiascape® is the combination of the words initiative and landscape because the study depicts the landscape of a community's initiatives.

The focus of the Access to Health Care Initiascape® included a general analysis of all programs with a focus on access to health care services as well as a specific analysis of the safety net for health care resources in Forsyth County.

Forsyth Futures has the following intentions for the Access to Health Care Initiascape®:

- ▮ Identify programs working to improve access to primary health care resources.
- ▮ Promote an understanding of the current scope of programs.
- ▮ Guide the community's efforts towards strategic actions.

The results from the Initiascape® study add to the analysis of the primary health care resources landscape, and they help guide recommendations for enhancing the system.

FORSYTH COUNTY'S PRIMARY HEALTH CARE SYSTEM

Both the availability of health insurance and health care providers impact how people access health care. Access to health insurance helps to provide the financial resources people need to acquire care. In addition, a community needs to have an adequate supply of primary health care providers to ensure that people can receive care in a timely manner. The federal government has developed standards that designate places that lack enough health care providers for the population served as Health Professional Shortage Areas (HPSAs).

Within our community, a network of programs evolved as a health care safety net for people without insurance. The safety net includes free and reduced cost medical and dental clinics, as well as free and reduced cost pharmacies and programs for medication assistance, and screening programs that may identify health issues that need further care. The following sections examine access to health insurance, availability of practitioners, and the health care safety net in Forsyth County.

SECTION HIGHLIGHTS

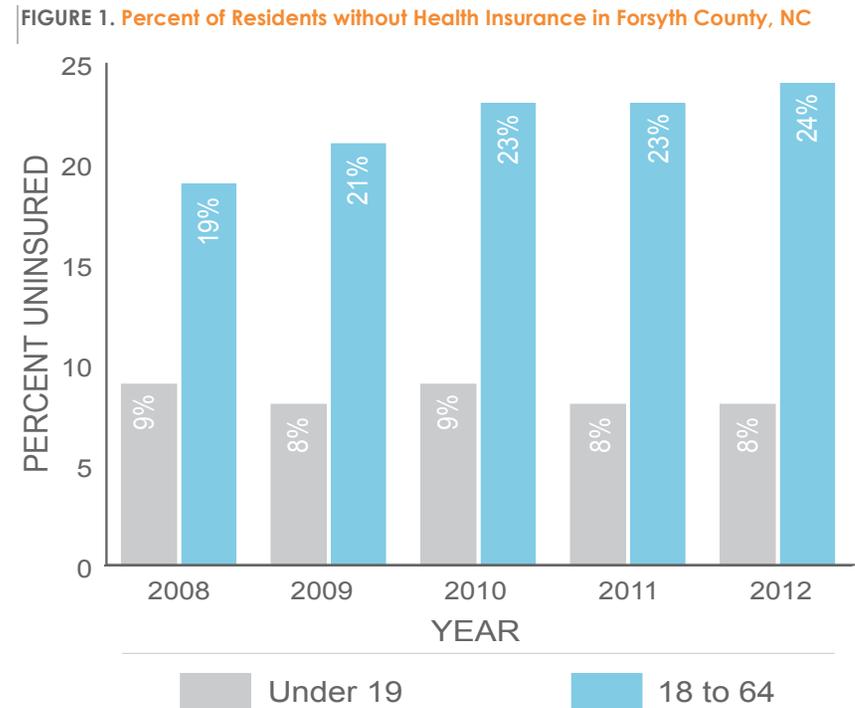
- In 2012, approximately 24 percent of residents ages 18 to 64 were uninsured in Forsyth County, an increase from 19 percent in 2008.
- The percentage of children under 19 without health insurance has remained steady with 8 to 9 percent of children being uninsured during the same time period.
- There are at least 95 programs that help residents access primary care, provided through by 48 different organizations.
- The most common services offered by access to healthcare programs are community education, screening, and referrals to medical care.
- Forsyth County has at least 15 community clinics that provide care to under- and uninsured residents on a sliding scale. The community clinics serve some of the county's sickest residents with fairly limited resources.
- The most common barriers experienced by community clinics are complexity of care, coordination of care across multiple volunteer doctors and agencies, limitations in what services clinics are able to provide, and the volume of patients.

Access to Health Insurance

Having health insurance facilitates access to medical resources to maintain an individual's health and well-being. A lack of insurance can further exacerbate not only health outcomes, but also an individual's economic status.¹ The following section examines the trend of residents without health insurance in Forsyth County from 2008 to 2012. The implementation of the Affordable Care Act (ACA) could have a significant impact on the trend of residents with out insurance, however, at the time of this report, data on the uninsured rate was not available post ACA. Understanding the trend before the implementation of ACA will allow for an analysis of ACA's impact on access to health insurance.

- From 2010 through 2012 about 64 percent of residents in Forsyth County had some form of private insurance.*
- During the same time period about 15 percent of Forsyth County's population had some sort of Medicare coverage.
- In April 2014, about 18 percent of residents were beneficiaries of Medicaid.
- Figure 1 shows that in 2012 approximately 24 percent of residents 18 to 64 in Forsyth County were uninsured, an increase from 19 percent in 2008.
- The percentage of children under 19 without health insurance has remained steady during this time period with 8 to 9 percent of children being uninsured.

*Private insurance includes an employer plan, a individual plan purchased through a private company, or TRICARE or other military plan.



Source: Small Area Health Insurance Estimate, U.S. Census (2008 - 2012)

AFFORDABLE CARE ACT

President Obama signed the Affordable Care Act (ACA) into law in March 2010. Open enrollment in the Health Insurance Marketplace began in October 2013, after the United States Supreme Court upheld two of its key provisions - the individual mandate and the option to expand Medicaid within the states.² ACA was enacted to address several problems with the current health care system, including increasing numbers of uninsured people, increasing health care costs, poor health of the general population, and unequal quality of care.³

Some of the highlights of the Affordable Care Act include:

- ▮ Ending pre-existing condition exclusions and allowing children up to age 26 to be covered under the parent's health plan.
- ▮ Ending lifetime limits on coverage, and covering preventive care at no cost to the individual.
- ▮ Providing prescription discounts for seniors by gradually closing the gap in coverage known as "the donut hole," a gap that results from guidelines in prescription drug coverage under Medicare Part D.⁴

- ▮ Giving states new opportunities to expand Medicaid coverage to individuals with family incomes at or below 133 percent of the federal poverty level.⁵
- ▮ Increasing access to comprehensive coverage by requiring most health plans to cover 10 essential health benefit categories, to include hospitalization, prescription drugs, maternity and newborn care, and mental health and substance use disorder services.⁶

North Carolina officials voted not to expand Medicaid, and that decision left unaddressed a gap in coverage for people below poverty level. In states that do not expand Medicaid, uninsured adults who have incomes above Medicaid eligibility levels but below poverty may fall into a "coverage gap" of earning too much to qualify for Medicaid, but not enough to qualify for Marketplace premium tax credits. Most of these people have very limited coverage options and are likely to remain uninsured.⁷

Health Practitioners

The availability of health practitioners is a second component that impacts access to primary health care. The Department of Health and Human Services provides guidelines for what is considered an adequate supply of primary care, dental care, and mental health providers.⁸ Distribution of practitioners throughout the county can impact how accessible resources are to residents seeking health care.

Data on the number of health professionals per resident indicate that at a county level, Forsyth County does not have a shortage of health professionals. However, this might not present the whole picture of availability of primary health care practitioners.

- Health care resources within Forsyth County are utilized not only by Forsyth County residents, but also serve residents within surrounding communities.
- Figure 2 (page 18) demonstrates that designated Health Professional Shortage Areas (HPSAs) exist within Forsyth County at a neighborhood level.
- Focus groups with residents and interviews with providers also indicate that some resources are more difficult to access than others, particularly for residents who are publically insured. As seen in Figure 3 (page 19), the majority of practices that accept Medicaid are located on the west side of Forsyth County, and areas with higher percentages of Medicaid beneficiaries are concentrated in the eastern side of Winston-Salem.

** Primary care include a primary specialty of family practice, general practice, internal medicine, obstetrics/gynecology, or pediatrics.*

Health Professional Shortage Areas

There are three categories of Health Professional Shortage Areas (HPSA): primary care, dental, and mental health.* HPSAs are designated using several criteria, including population-to-clinician ratios. This ratio is 3,500 to 1 for primary care, 5,000 to 1 for dental health care, and 30,000 to 1 for mental health care.⁹

Table 1 demonstrates the ratio of practitioners in Forsyth County in 2012.

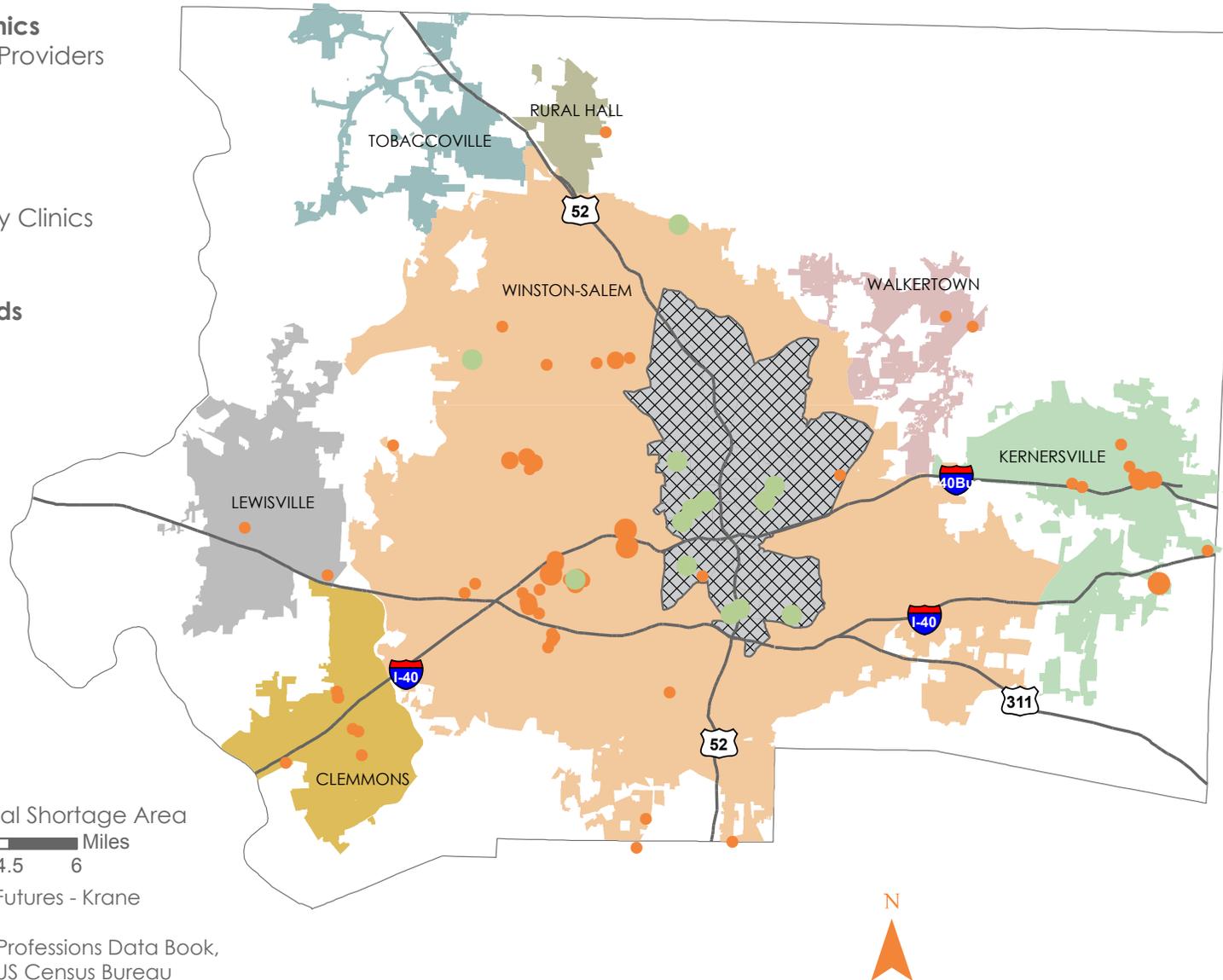
TABLE 1. Ratio of Health Professionals in Forsyth County, 2012

HEALTH PROFESSION	2012 RATIO
Primary Care	819 residents to 1 Primary Care Physicians
Dental Health	1,914 residents to 1 Dentist
Mental Health	4,267 residents to 1 Psychiatrist

Source: NC Health Professions Data Book, UNC SHEPS Center (2003 - 2012)

FIGURE 2. Primary Care Physicians in Relation to the Health Professional Shortage Area (HPSA) in Forsyth County, NC

- Primary Care Clinics**
Total Number of Providers
- 0 - 6
 - 7 - 16
 - 17 - 29
 - Community Clinics
- ▨ HPSA*
- Major Roads



* Health Professional Shortage Area

0 0.75 1.5 3 4.5 6 Miles

Created by Forsyth Futures - Krane
November 2014
Sources: NC Health Professions Data Book,
UNC Sheps Center; US Census Bureau

FIGURE 3. Primary Care Practices Accepting Medicaid and Percentage of Medicaid Beneficiaries by Census Tract in Forsyth County, NC

**Primary Care Practices
Accepting Medicaid**

Total Number of Providers

- 0 - 3
- 4 - 7
- 8 - 29
- Community Clinic

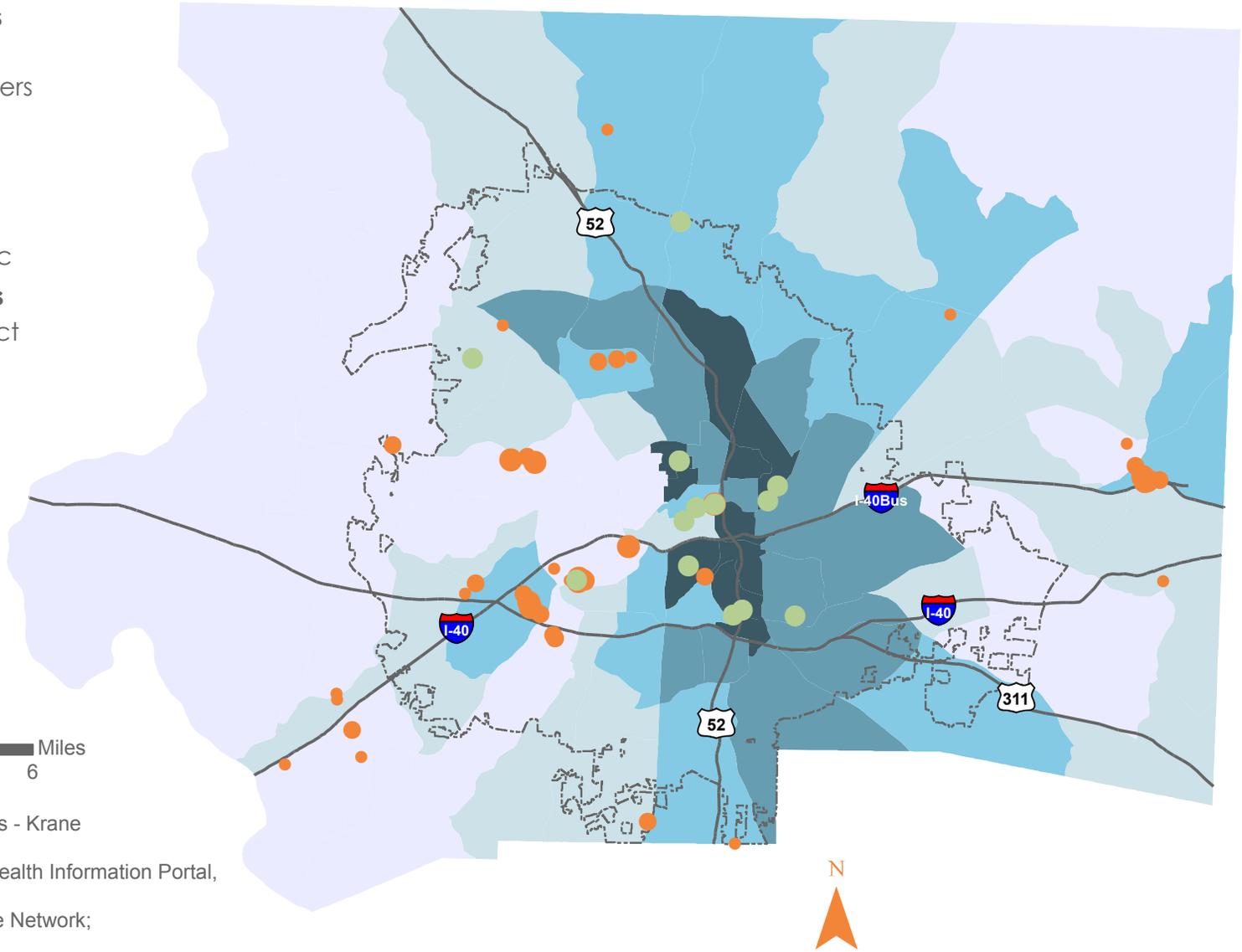
Medicaid Beneficiaries

Percent by Census Tract

- 0% - 8%
- 9% - 14%
- 15% - 23%
- 24% - 34%
- 35% - 50%
- ▭ Winston-Salem
- Major Roads

0 0.75 1.5 3 4.5 6 Miles

Created by: Forsyth Futures - Krane
 September 2014
 Sources: NC Community Health Information Portal,
 Community Care Network;
 Northwest Community Care Network;
 US Census Bureau



ACCESS TO HEALTH CARE INITIASCAPE®

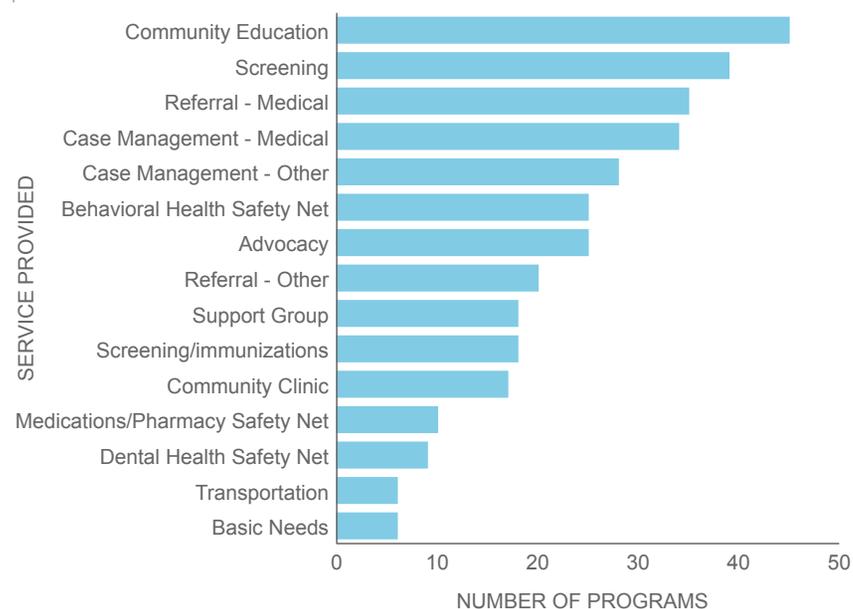
The Access to Health Care Initiascape® analysis provided insight on current efforts working to improve access to primary health care resources in Forsyth County.* This includes programs that provide free or low cost health care to the general population, wellness education, health screening programs, case management services, and referral programs that connect people to primary care providers. This Initiascape® does not include private medical practices. Understanding the dynamics of existing programs will assist the community in mobilizing future efforts.

- At least 95 unique programs help residents access primary and behavioral health care resources.**
- All programs are administered by 48 different organizations. The majority of these organizations are non-profits (30) or faith based non-profits (15).
- The organizations with the most programs working to improve access to primary health care resources are the Forsyth County Department of Public Health and Wake Forest Baptist Medical Center, with 22 and 15 programs respectively.
- As shown in Figure 4, 45 programs, or almost half of all programs, provide community health education. The next most common services are screenings, medical referrals, and case management.

* All data for the Initiascape® analysis are point-in-time and based on internet research and personal communications.

** A full list of programs and organizations in the Access to Health Care Initiascape® is found in Appendix C.

FIGURE 4. Services provided by Access to Healthcare Programs



Source: Forsyth Futures' Access to Health Care Initiascape®

HEALTH CARE SAFETY NET

For residents that are under- or uninsured, obtaining health care resources can be difficult and, in some cases, can become a financial burden. A health care safety net is in place to help these residents access health care that they may not otherwise receive. The Institute of Medicine defines the health care safety net as: “Those providers that organize and deliver a significant level of health care and other related services to uninsured, Medicaid, and other vulnerable populations.”¹⁰

A health care safety net has a range of health care resources that provide care for uninsured or underinsured residents:

- ▮ Hospital emergency departments (ED)
- ▮ Federally Qualified Health Centers (FQHC)
- ▮ State-funded rural health centers
- ▮ Public Health Departments
- ▮ Free and reduced cost clinics
- ▮ Medication assistance programs
- ▮ Hospital charity services
- ▮ Dental services
- ▮ Behavioral health services
- ▮ Other non-profit safety net organizations
- ▮ Medication assistance programs

Forsyth County’s health care safety net is comprised of a network of programs that provide primary care services for people without adequate financial resources for health care. The programs include free and reduced cost community clinics that provide, programs that provide health screenings, dental clinics and pharmacies and medication assistance programs. The following section focuses on four components of the health care safety net: community clinics, medication assistance, behavioral health, and dental health.

Community Clinics

As part of the Health Care Safety Net Initiatives© Forsyth Futures completed a specific analysis of community clinics in Forsyth County. For the purpose of this study we defined a community clinic as a medical clinic that provides primary health care services for free, or on a sliding scale, to residents who are uninsured, underinsured, or do not have adequate financial resources for health care. Forsyth Futures’ staff collected information on community clinics through interviews with community clinic representatives.

- | As seen in Table 2, at least 15 community clinics, which provide primary health care services, currently operate in Forsyth County.
- | There are two primary types of community clinics: larger community clinics that operate like traditional doctors’ offices and smaller drop-in clinics, which do not take appointments. The drop-in clinics are typically faith-based, tend to have fewer resources, and are usually only open a few times a month.
- | A few of the community clinics serve specific populations; two provide only general gynecological services, one is a pediatric office, and one is a school-based clinic.
- | All of the community clinics in Forsyth County are operated by either non-profit or faith-based organizations.

| Figure 5 (pg 24) demonstrates that the community clinics have limited operational hours, with the majority of these clinics operating during regular business hours of 8 a.m. to 5 p.m.

TABLE 2. Community Clinics in Forsyth County, 2014

COMMUNITY CLINIC
Health and Wellness Clinic of the Triad Region at Bethany Baptist Church
Bulldog Health Center at Mineral Springs Elementary**
Community Care Center
Community Mosque Triad Free Health Clinic
Delivering Equal Access to Care (DEAC) - Wake Forest School of Medicine
Downtown Health Plaza - Wake Forest Baptist Medical Center
Love Thy Neighbor - Centenary United Methodist Church
Southside Medical Clinic
Southside United Health and Wellness Center
The Old Town Baptist Medical Mission
The Shalom Project Free Medical Clinic
Today’s Woman - Novant Health*
Winston East Pediatrics - Wake Forest Baptist Medical Center
Winston-Salem Health Center - Planned Parenthood*
Winston-Salem Rescue Mission Medical Clinic

Source: Forsyth Futures’ Access to Health Care Initiatives©, based on internet research and personal communication.

* Provides general gynecological services only, Today’s Woman provides reduced cost care to eligible pregnant women in 27105.

** Two other elementary schools, Ashley and Winston-Salem Preparatory Academy, have wellness centers, but have a nurse on site versus a medical doctor, physicians assistant, or nurse practitioner that can write prescriptions.

Barriers to Community Clinics

Based on interviews with community clinics, Forsyth Futures identified the following barriers for providing care at community clinics:

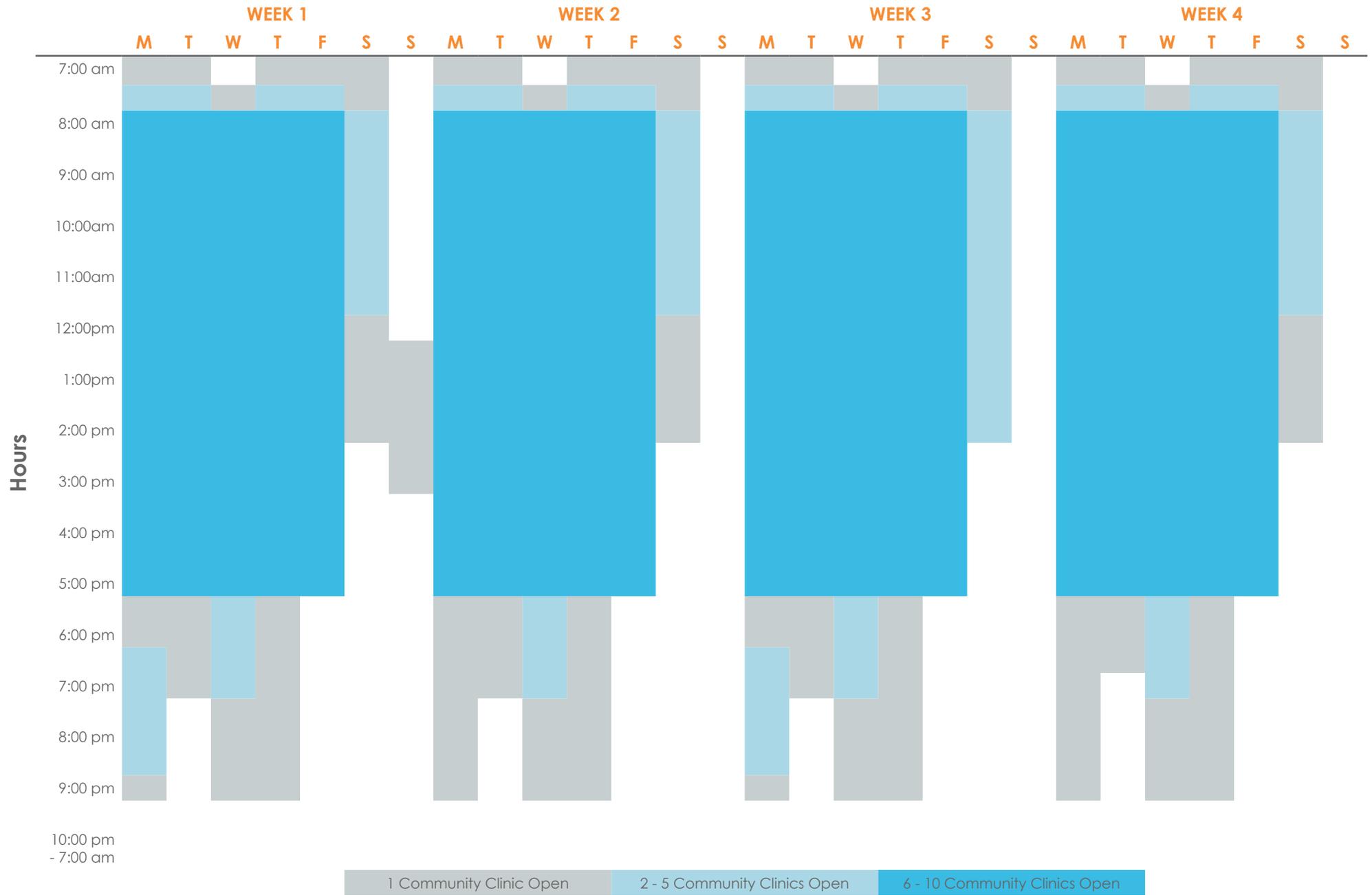
- ▮ **Coordination of Care:** The majority of clinic providers mentioned challenges in organizing and communicating about patients care across multiple providers, clinics, and community resources.
- ▮ **Complexity of Care:** Clients using the community clinic system tend to have more complex cases, including chronic conditions and multiple diagnoses coupled with socioeconomic factors that complicate their care.
- ▮ **Scope of Practice:** One of the most common barriers community clinic providers listed was the inability to provide some services. Services they were unable to provide often included specific tests, procedures, medication, or specialty care.
- ▮ **Volume:** Some clinics also noted the inability to serve the volume of patients requesting services and had to turn patients away.

Safety Net Resource: HealthCare Access

HealthCare Access is a safety net resource serving Forsyth County that connects uninsured residents with volunteer physicians. Through a network of physicians, partner organizations and funders residents can access primary and specialty care resources in Forsyth County.¹¹

- ▮ More than 1,360 physicians provide care to the uninsured through HealthCare Access.¹²
- ▮ In 2012, HealthCare Access enrolled almost 4,000 residents and arranged for almost 40,000 visits with a physician.¹³
- ▮ Almost one third of visits arranged were for primary care physicians.¹⁴

FIGURE 5. Hours of Community Clinics in Forsyth County, 2014



Medication Assistance

A second component of the health care safety net is programs that provide medication for free or at a reduced cost. Through interviews with providers and focus groups with residents it became apparent that it is not uncommon for residents to struggle with filling prescriptions and following through on medication directives from physicians. The primary reason given for this struggle was cost of medications. Many participants mentioned the need to balance paying for medication and other expenses, including basic needs such as rent, utilities, or food. Ensuring patients have access to medication prescribed by a physician can help patients recover faster, avoid becoming increasingly sicker, and avoid additional costs associated with a persistent medical condition.

- ▮ There are 11 programs in Forsyth County that provide free or reduced cost medication.
- ▮ Six of the programs are based in non-profits, three in faith-based organizations, and two in government agencies.
- ▮ Like the community clinics, free and reduced cost pharmacies are primarily open during traditional business hours.
- ▮ Through the 340B Drug Pricing Program, a program of the U.S. Department of Health and Human Services, both medical centers in Forsyth County are able to provide reduce cost drugs to low-income patients that qualify for discounted medications.¹⁵

*Behavioral Health Safety Net**

Through focus groups and interviews with community experts it is clear that accessing behavioral health resources is a challenge for residents, particularly residents who are under- or uninsured, relying on public insurance, children, and older adults. The safety net is designed to include resources that assist under- or uninsured residents and those relying on public insurance in accessing behavioral health services. The primary component of the behavioral health safety net for North Carolina is through local management entities (LMEs) designed to connect residents receiving Medicaid or state funding to behavioral health services. Center-Point Human Services is the LME serving Forsyth County and in addition serves Stokes, Davie, and Rockingham counties.

- | In 2011, less than five percent of ED visits were for a behavioral health primary diagnosis.**
- | Approximately 27 programs exist in the behavioral health safety net in Forsyth County. These programs include clinical services, counseling, referrals, support groups, and advocacy.
- | Seven of the programs are specific to individuals with a substance abuse diagnosis, seven serve only children, one serves older adults, and one serves persons who are homeless.

Interviews with community experts reveal the following concerns within the behavioral health safety net:

- | A shortage of providers results in longer wait times, which might discourage some residents with behavioral health needs from seeking care.
- | For some residents seeking behavioral health services the complexity of medical and social needs, such as multiple prescriptions and housing instability, creates challenges in providing care.
- | Navigating the behavioral health system is a challenge.
- | Patients using the ED for short-term care instead of receiving consistent outpatient care.

* Behavioral health includes mental health and substance abuse.

** In many cases behavioral health is listed as a secondary diagnosis during an ED visit, as a result the percent of all visits with a behavioral health diagnosis is probably higher.

Dental Health Safety Net

Dental health is another area that focus groups and interview participants identified as having challenges in accessing services for residents with limited financial resources. To better understand resources in the dental health safety net and to develop a solution, the Kate B. Reynolds Charitable Trust, along with community partners, convened a Dental Health Coalition. The purpose of the Coalition was to to develop strategies for increasing access to oral health care for underserved residents of Forsyth County. The Trust hired Safety Net Solutions to develop a comprehensive inventory of existing and potential oral health resources in Forsyth County for low income, insured and uninsured adults and children.* As a result of the work of the Coalition the Kate B. Reynolds Charitable Trust approved a grant to stabilize the Cleveland Avenue Dental Clinic.¹⁶ The following points are a summary of the Safety Net Solutions study:

- ▮ At the time of this study seven free or reduced cost dental clinics or programs provide cleanings and dental work at various times in Forsyth County, and one community clinic provides extractions only.
- ▮ The Forsyth County Department of Public Health also provides screenings through the School Age Dental Health Program.
- ▮ Only one clinic operates year round, others set up once a year or quarterly.
- ▮ Four of the programs are operated by faith-based organizations, three by government agencies, and two by non-profits.
- ▮ All clinics are located in Winston-Salem except for one that operates on a quarterly basis in Kernersville.
- ▮ In Forsyth County, 46 general dentists accept patients with Medicaid, however 11 of these dentists are not currently accepting new patients.
- ▮ Forsyth Futures' analysis of emergency department data found that while in 2011 dental concerns make up only two percent of all ED visits they are the third most common diagnosis for uninsured patients in the ED (approximately five percent of uninsured visits).

* A consulting organization that provides technical assistance to communities working to strengthen the dental safety net.

PRIMARY HEALTH CARE RESOURCE UTILIZATION

The choices patients make about where and when to seek health care provide information that can be useful for the medical community and health care safety net providers as they plan to meet community needs for primary care. Forsyth Futures studied diagnoses from local emergency departments (ED), and conducted surveys and interviews with residents to better understand what health resources residents of Forsyth County are using.

Many communities struggle with the use of EDs for conditions that could have been prevented or treated with timely care from a primary care provider. Forsyth Futures used the NYU ED Algorithm to better understand ED utilization in Forsyth County.

Surveys and interviews with community members revealed barriers to accessing primary care in Forsyth County. Understanding and addressing these challenges can help patients reach the appropriate level of care in a timely manner.

The following sections evaluate the use of primary care resources, emergency department use, and barriers that influence how patients seek and access health care.

SECTION HIGHLIGHTS

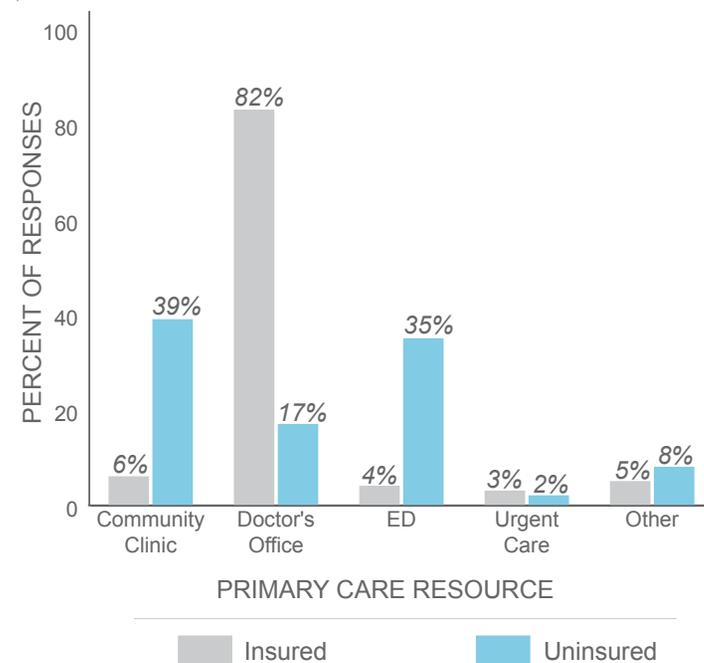
- ▮ About 88 percent of respondents to the Forsyth Futures' survey reported having one place they usually go when sick or needing advice about health care.
- ▮ Respondents with health insurance were more likely to use a doctor's office as the place they went most often than respondents without health insurance, 82 percent and 17 percent respectively.
- ▮ Respondents without insurance were almost as likely to use community clinics as the emergency room for care when sick or needing advice about health care (39 percent and 35 percent).
- ▮ About half of ED visits in 2011, by Forsyth County residents, could have been treated or prevented with timely care from a primary care physician.
- ▮ Patients with Medicaid or without insurance were approximately five times as likely as patients paying with commercial insurance to use the ED for conditions that are primary care treatable or preventable.
- ▮ The zip codes in Forsyth County with the highest rate of ED use for treatable or preventable conditions were 27105 and 27101.
- ▮ About a third of survey respondents had delayed or not gotten medical care in the past year.
- ▮ The most common reasons that Forsyth County residents delay seeking health care are the cost of care and medication, a lack of transportation, not being able to take time off work, and difficulty navigating a complex system of care.

PRIMARY CARE PROVIDER USE

The ability to receive an appropriate level of healthcare in a timely manner is important for an individual's health. Having insurance impacted where respondents in our survey sought healthcare. Focus group participants said they consider cost and the severity of the problem when deciding where to go for health care. According to interviews with health care providers, people sometimes wait to seek care when they lack financial resources and can end up at the emergency department for conditions that could have been treated or prevented in a primary care setting. The following section examines how survey respondents access primary healthcare resources in our community.

- ▮ About 88 percent of respondents to the Forsyth Futures survey reported having one place they usually go when sick or needing advice about health care.
- ▮ Of those survey respondents who have a regular place for care the majority (about 68 percent) go to a doctor's office when sick, 11 percent used community clinics as their primary source of care, and 9 percent reported using the emergency room as their primary source.
- ▮ Figure 6 shows respondents with health insurance were more likely to use a doctor's office as the place they went most often, compared to respondents without health insurance, 82 percent and 17 percent respectively.
- ▮ Respondents without insurance were about equally likely to use community clinics or the emergency room (39 percent and 35 percent).
- ▮ About one third of survey respondents reported having delayed medical care.

FIGURE 6. Places of Regular Care in Forsyth County



Source: Forsyth Futures' community survey

EMERGENCY DEPARTMENT USE

The ways that people use hospital emergency departments can provide valuable information about a community’s access to health care. Emergency departments are required by law to provide care to individuals who seek care at their locations, and emergency departments are open 24 hours a day.¹⁷ For that reason, emergency departments are a place that a person can be assured of accessing care.

- | In 2011, there was approximately one ED visit per every two residents in Forsyth County.
- | Approximately half of the ED visits in 2011, by Forsyth County residents, could have been treated or prevented with timely care from a primary care physician.
- | The most common condition treated in emergency departments was diseases of the heart, e.g. heart attack, heart valve disorders, and heart failure. Table 3 shows the 10 most common conditions treated in the ED in 2011.

TABLE 3. Top 10 Conditions Seen in Forsyth County Emergency Departments, 2011

CONDITION	ED VISITS
Diseases of the heart	7%
Respiratory infections	6%
Sprains and strains	6%
Diseases of the urinary system	5%
Abdominal pain	4%
Superficial injury; contusion	4%
Open wounds	4%
Back conditions (e.g. arthritis, disk deterioration, and herniation)	3%
Fractures	3%
Headache, including migraine	3%

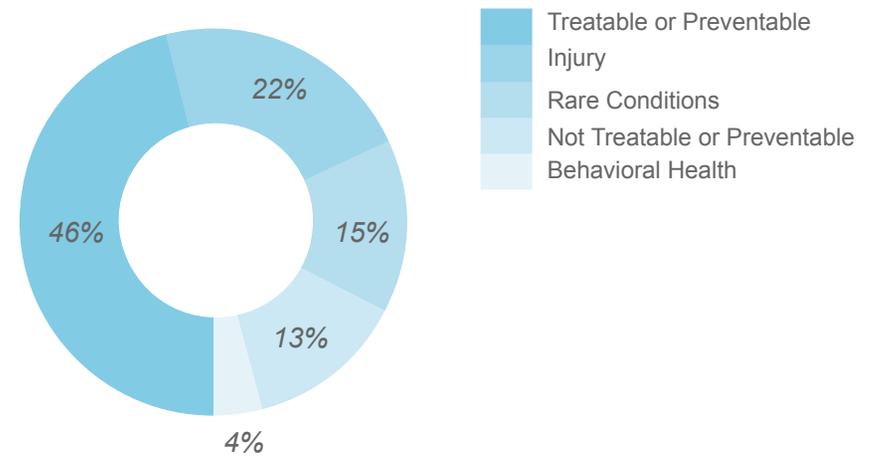
Source: Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center

EMERGENCY DEPARTMENT USE, CONTINUED

In many cases, people are using the emergency departments for conditions that could have been treated or prevented in a primary care setting. Understanding the rate of ED usage for these conditions may help identify opportunities to redirect some of these visits to less costly primary care providers, when appropriate. New York University (NYU) developed the NYU ED Algorithm (NYU Algorithm) to help categorize ED visits as treatable or preventable with timely primary care.¹⁸ Forsyth Futures used the NYU Algorithm to better understand ED usage in Forsyth County. The NYU Algorithm was also used to look at ED visits by various subgroups, such as payer, gender, race/ethnicity and age.

- As demonstrated by Figure 7 approximately half of ED visits by Forsyth County residents in 2011 could have been treated or prevented with timely care from a primary care physician.
- Approximately 13 percent could not have been treated or prevented outside of the ED with primary care services.
- Diagnosis for the remaining 40 percent of visits include injuries, behavioral health, and rare conditions. The NYU Algorithm does not classify these diagnosis as primary care treatable and preventable, or untreatable and preventable with primary care in the algorithm.

FIGURE 7. Percent of ED Use as Classified by the NYU Algorithm, 2011



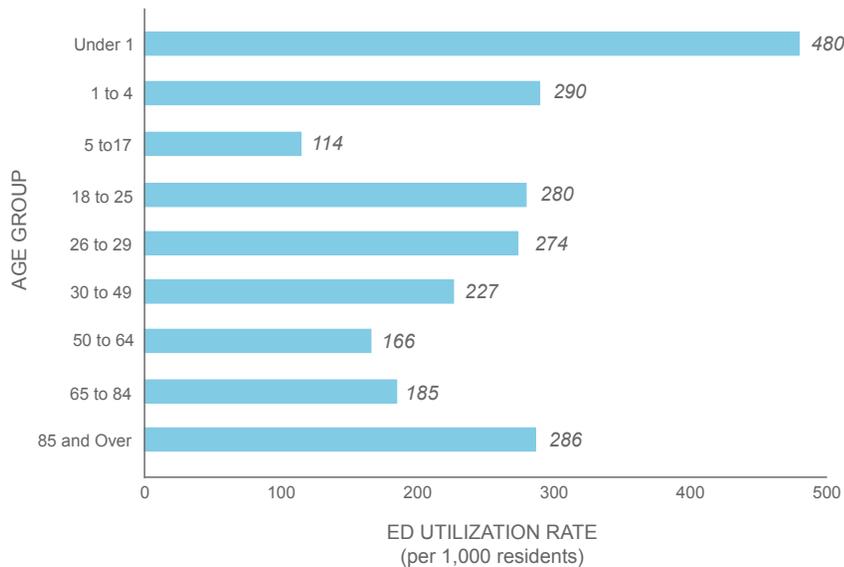
Source: Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center

EMERGENCY DEPARTMENT USE, CONTINUED

When looking at ED visits by subgroup, it is apparent that some groups had more ED visits in 2011 that could have been treated or prevented in a primary care setting than others. The following section demonstrates the use of the ED for primary care treatable or preventable conditions by subgroup.

Age: It was more common for infants under the age of one to receive treatment in the ED for a condition that was primary care treatable or preventable than for any other age group.

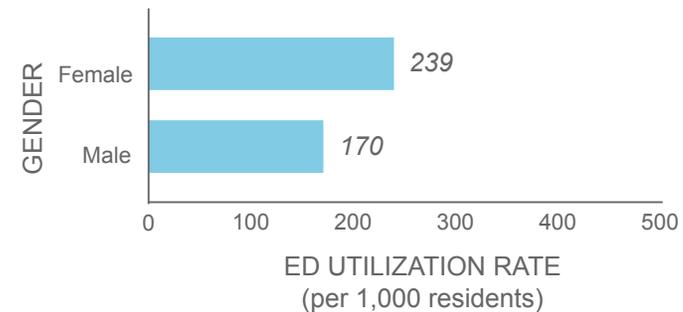
FIGURE 8. Rate of Treatable or Preventable ED Visits by Age Group in Forsyth County, 2011



Source: Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center

Gender: In Forsyth County women were more likely than men to seek care in an ED for a condition that was treatable or preventable in the primary care setting.

FIGURE 9. Rate of Treatable or Preventable ED Visits by Gender in Forsyth County, 2011 (Age Adjusted)

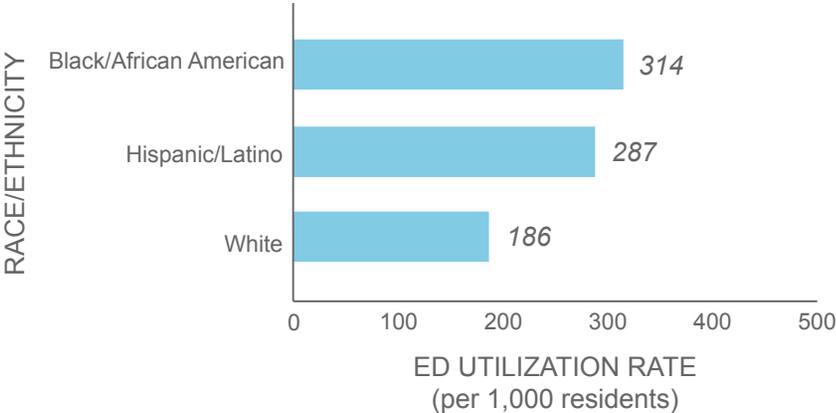


Source: Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center

EMERGENCY DEPARTMENT USE, CONTINUED

Race/Ethnicity: Black/African American and Hispanic/Latino residents were more likely to use the ED for conditions that were primary care treatable or preventable than White residents in Forsyth County.

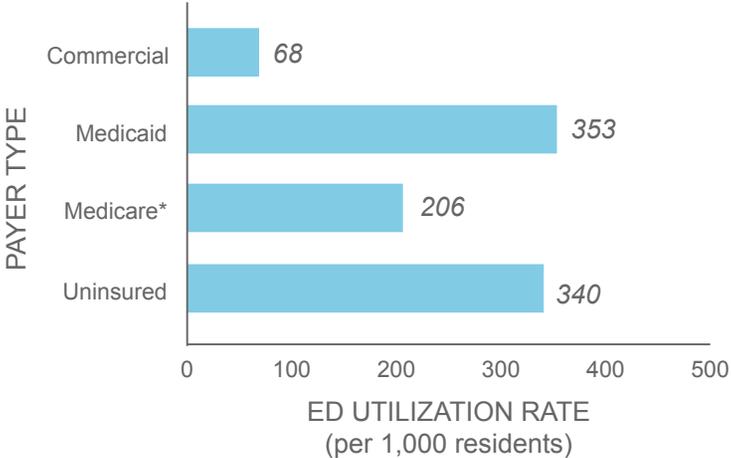
FIGURE 10. Rate of Treatable or Preventable ED Visits by Race/Ethnicity in Forsyth County, 2011 (Age Adjusted)



Source: Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center

Payer: ED visits for primary care treatable or preventable conditions by patients with Medicaid or without insurance were approximately five times as high as visits paid for with commercial insurance. The same type of visits by Medicare patients were three times as high as commercial insurance visits.

FIGURE 11. Rate of Treatable or Preventable ED Visits by Payer in Forsyth County, 2011

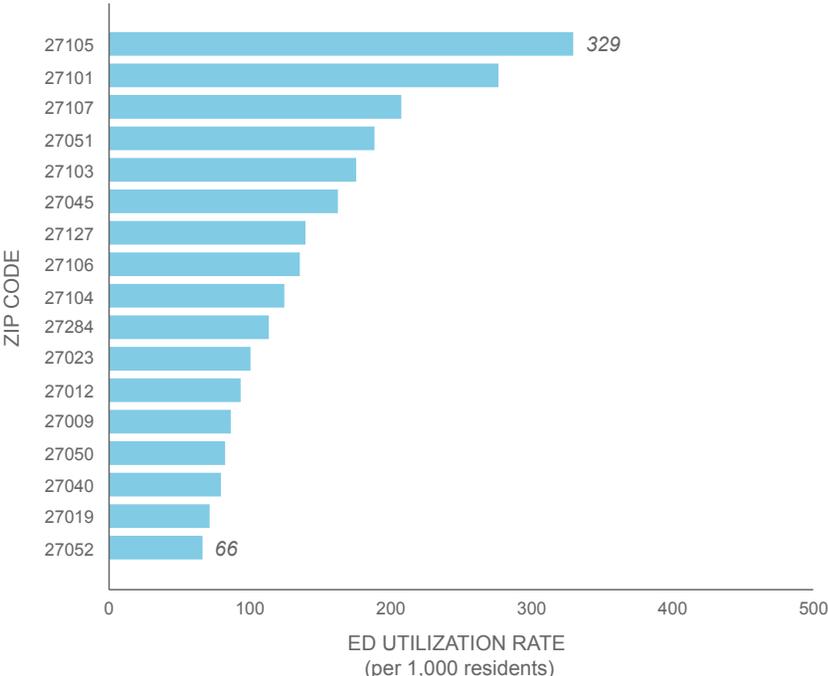


Source: Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center

EMERGENCY DEPARTMENT USE, CONTINUED

Zipcode: The zipcodes in Forsyth County with the highest rate of ED use for treatable or preventable conditions were 27105 and 27101. Both zipcodes are located on the eastern side of Winston-Salem.

FIGURE 12. Rate of Treatable or Preventable ED Visits by Payer in Forsyth County, 2011



Source: Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center

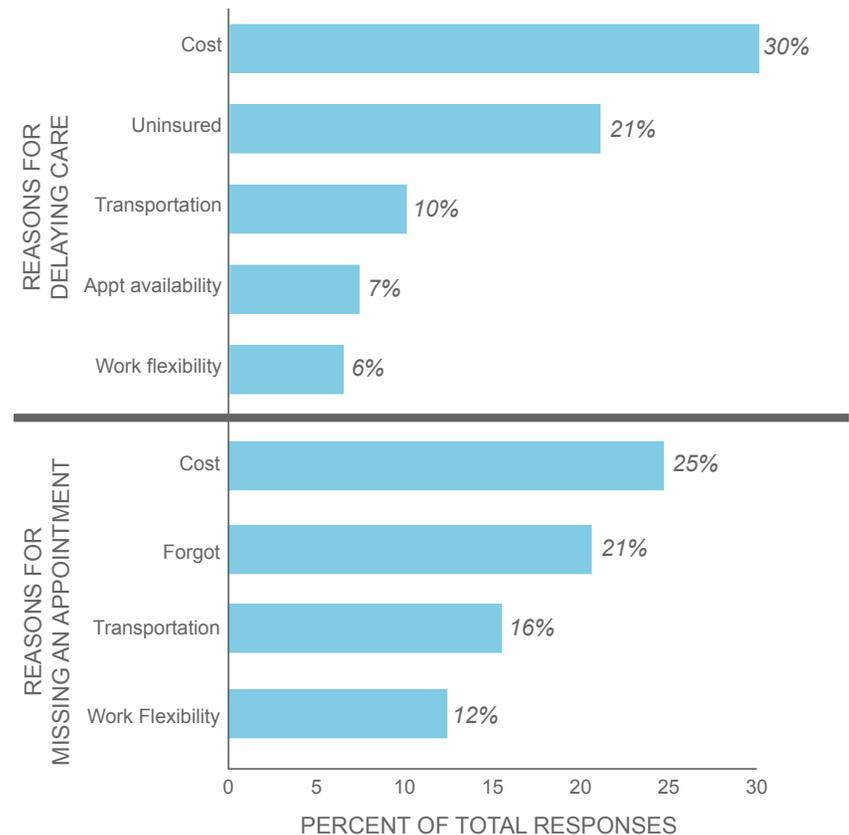
BARRIERS TO ACCESSING PRIMARY HEALTH CARE

People who responded to community interviews, focus groups, and surveys cited cost, transportation, hours of operation, work flexibility, and complexity of the system as barriers to accessing health care resources in Forsyth County. Respondents said these barriers deter or prevent residents from seeking care, and as a result potentially lead to increasing health problems. The following section provides an overview of each of these issues.

Cost

- As shown in Figure 13, respondents to Forsyth Futures' community survey identified cost most often as the primary reason for delaying care or missing an appointment.
- According to responses in interviews and focus groups cost of health care services is a concern for not only the uninsured, but also those with insurance who might have high deductibles or co-payments.
- During some interviews, providers referred to the lack of care due to cost as a vicious cycle. As patients delay care they become sicker, and potentially require a more expensive treatment.
- A common theme among focus group participants and community experts is that the high cost of prescriptions is a barrier to health care, especially for patients taking multiple prescriptions.

FIGURE 13. Reasons for Delaying Care or Missing an Appointment, 2014



Source: Forsyth Futures' community survey

BARRIERS TO ACCESSING PRIMARY HEALTH CARE, CONTINUED

Transportation

- ▮ Survey respondents identified transportation as a primary reason for delaying care and missing appointments.
- ▮ Figure 14 (page 27) demonstrates that areas with high percentages of residents without access to a vehicle have fewer primary care clinics nearby. While public transportation routes and stops run through these areas, having to rely on the schedule of buses can create challenges in getting to appointments.

Hours of Operation & Work Flexibility

- ▮ One finding from interviews and focus groups is the disconnect between hours of operation of primary care practices and community clinics, which are traditional work hours, and the inability for many workers to take time away from work.
- ▮ According to interviews with providers, for many residents without work flexibility, the decision to go to the doctor can have a direct financial cost, including lost earnings and, potentially, job loss.

Complex System

- ▮ According to interviews, the complexity of the health care system creates a challenge for residents trying to navigate the system to successfully seek needed care or comply with doctor's instructions.

FIGURE 14. Percent of Households without Access to a Vehicle in Relation to Primary Care Clinics in Forsyth County, NC

**Percent of Households
with No Vehicle**

- 0 - 5%
- 6% - 10%
- 11% - 15%
- 16% - 25%
- 26% - 55%

Primary Care Locations

- Primary Care Clinics
- Community Clinics

Bus Stops

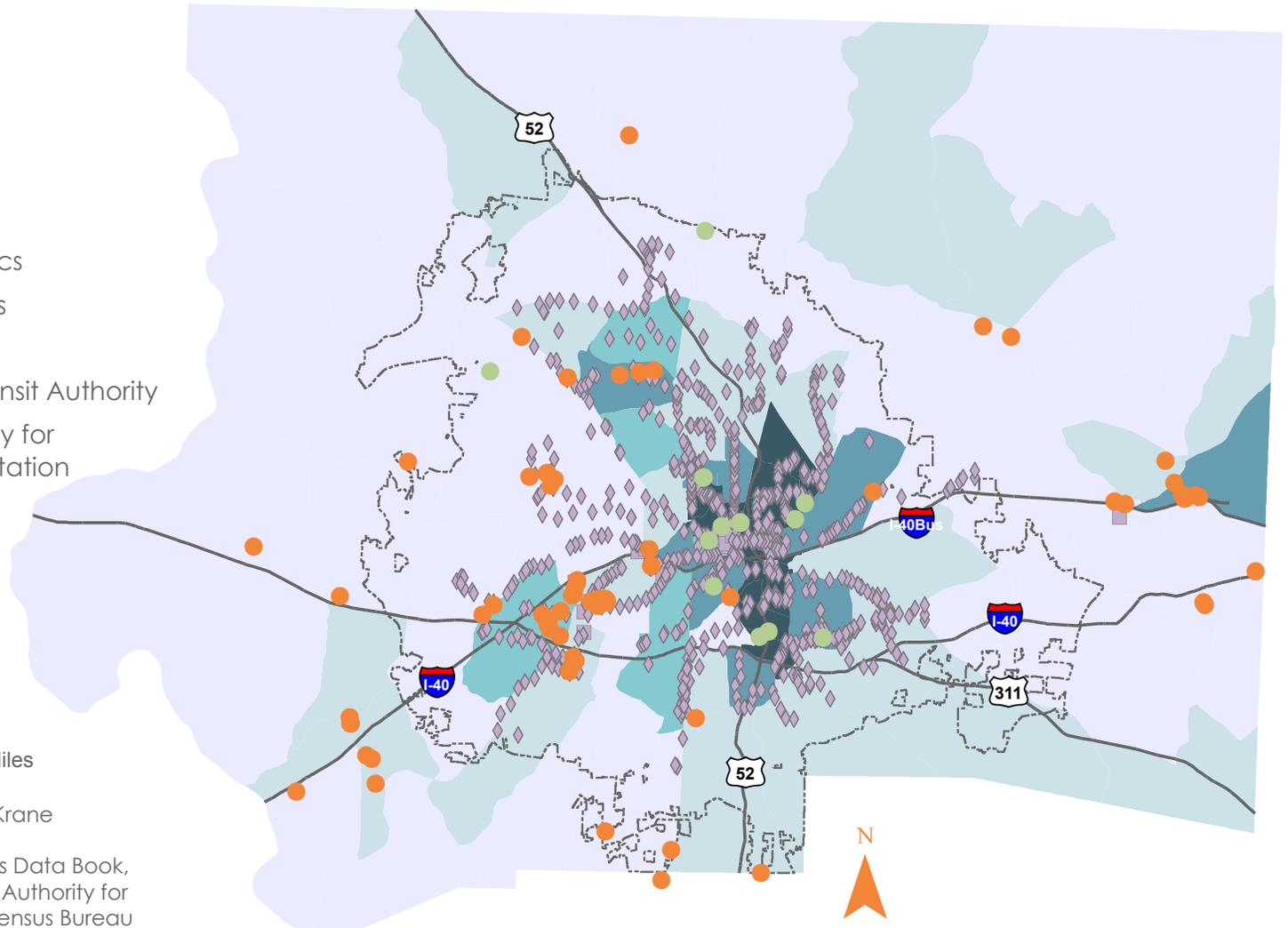
- Winston Salem Transit Authority
- Piedmont Authority for Regional Transportation

- Major Roads
- Winston-Salem

Miles
0 0.75 1.5 3 4.5 6

Created by: Forsyth Futures - Krane
November 2014

Sources: NC Health Professions Data Book,
UNC Sheps Center; Piedmont Authority for
Regional Transportation; US Census Bureau



OPPORTUNITIES FOR COMMUNITY ACTION

Data collected and analyzed during the study indicate the complexity of the health care system and the challenges that exist in ensuring access to primary care resources. Forsyth County benefits from the existence of two large medical centers, the resources that come with these centers, and a strong community of programs working towards improving access to health care resources. Community organizations and non-profits, government entities, and individual residents are all key players in the current system, and understanding where challenges exist can assist these stakeholders to address challenges. Based on the identified findings and a case study review Forsyth Futures developed a set of opportunities for community action. The following section identifies the key findings and explores opportunities for community action. A summary of case studies is located in Appendix D. The combination of an active community and current initiatives provides the foundation for a coordinated effort in decreasing barriers to accessing primary care services.

TABLE 4. Key Findings and Rationales

FINDINGS & RATIONALE

1. **A LACK OF ADEQUATE INSURANCE COVERAGE:** A lack of health insurance contributes to barriers in accessing health care resources. The number of adults without insurance increased from 2008 to 2012. With the most recent insurance data being from 2012, it is not yet clear how implementation of the Affordable Care Act will impact these numbers.

2. **AFFORDABILITY OF HEALTH CARE:** One of the primary barriers to receiving needed primary health care services was cost. This is true not only for those without health insurance, but was also expressed by those with health insurance. The increase in high deductible plans and high copays has caused even some with insurance to feel they can not afford needed health care services. This applies to doctor visits and procedures, as well as prescription medications as well.

3. **SCARCE HEALTH CARE RESOURCES IN HIGH NEED AREAS:** While Forsyth County has a large number of primary care practices and physicians, there is a designated Health Professional Shortage Area within Winston-Salem. This is in area that also has a high percentage of Medicaid beneficiaries and persons without access to a vehicle.

4. **LACK OF ACCESS TO DENTAL & BEHAVIORAL HEALTH PROVIDERS:** A common theme among interviews and focus groups was difficulty accessing dental and behavioral health providers, particularly for individuals that are publicly insured or uninsured.

5. **BARRIERS TO PROVIDING CARE IN COMMUNITY CLINICS:** Forsyth County has a number of community clinics working to increase access to persons who are under- or uninsured. However, a variety of challenges exist to providing this care including coordination of care, complexity of care, scope of services and volume.

6. **NAVIGATION OF THE HEALTH CARE SYSTEM:** Through focus groups and interviews many residents expressed how difficult it was to navigate the health care system. A lack of understanding of the health care system limits peoples ability to be proactive about their health.

7. **USE OF THE EMERGENCY DEPARTMENT FOR PRIMARY CARE PREVENTABLE OR TREATABLE CONDITIONS:** Almost half of emergency department visits in Forsyth County are for conditions that could have been treated or prevented with timely primary care. In many cases this does not indicate an abuse of the system, but rather the existence of barriers that keep residents from accessing primary care resources including lack of insurance, primary care clinics hours of operation, and cost.

CONVENE COMMUNITY CLINICS & REDUCED COST PHARMACIES

Key Finding: Barriers to providing care in community clinics

Through interviews community clinics identified several barriers to providing care including the scope of services they could provide and the ability to connect patients with further medical services. This is particularly true for smaller community clinics. Convening community clinics provides the opportunity to connect with each other, share best practices, understand the availability of services in the community to refer patients to, and plan for referrals and program collaborations in ways that make coordination of patient care easier. Strengthening the ability of community clinics to provide care could allow for more residents without insurance to receive needed health care services.

INVESTIGATE THE USE OF PARAMEDICINE OR MOBILE CLINICS IN HEALTH PROFESSIONAL SHORTAGE AREAS

Key Finding: Scarce health care resources in high need areas

For areas designated as a Health Professional Shortage Areas (HPSA) unique and innovative opportunities exist for increasing access to health care. Some communities have used paramedics with special training to care for patients at home under the supervision of a physician, also known as paramedicine, or mobile clinics to meet these needs. Home visits from paramedicine staff can help residents with medical conditions that require close monitoring, such as diabetes, high blood pressure, congestive heart failure, increased risk of falls, and asthma, prevent medical crises. They can also redirect patients with mental health or substance abuse needs who do not need to be seen in the emergency department to another source of care.

ENCOURAGE THE EXPANSION/ESTABLISHMENT OF SCHOOL- AND WORK- BASED CLINICS

Key Findings: Affordability of healthcare; Use of the emergency department for primary care preventable or treatable conditions

Some employers and schools in Forsyth County and North Carolina have already established onsite clinics at schools and work places. These clinics are often staffed with midlevel medical practitioners that can provide primary care onsite. One potential opportunity for expansion is the use of telemedicine, the use of electronic communication to exchange medical information between a provider and patient, at school- and work- based sites. Some school-based clinics in other parts of the country have experienced considerable success with using telemedicine to connect their school clinics to physicians when needed.¹⁹ Studies of school- and work-based clinics have indicated that they can be cost effective, and decrease the amount of time that employees miss to take care of their own and their children's health problems. They also encourage residents to seek early care for emerging issues, which sometimes prevents emergency department visits for conditions that are treatable or preventable in a primary care setting.^{20,21,22,23,24}

INCREASE AVAILABILITY OF AFTER-HOURS PRIMARY CARE

Key Finding: Use of the emergency department for primary care preventable or treatable conditions

Local residents and community experts identified residents not being able to take time off of work to attend doctor's appointment as a major barrier to care. Most primary care practices and community clinic programs are only open during the standard business day, which creates a problem for these residents. Additionally, community experts identified this barrier as a potential reason that residents go to the emergency department with conditions that could have been treated in a primary care setting. Forsyth Futures was unable to address the hours of all primary care services as a part of this study, so additional community research is needed to identify which hours and service locations are most needed by the community. Consulting residents, along with emergency department staff and primary care resources that are currently open after hours could help identify the need in this area.

EXPLORE FEASIBILITY OF LOCATING A PRIMARY CARE CLINIC NEAR EMERGENCY DEPARTMENT

Key Finding: Use of the emergency department for primary care preventable or treatable conditions

In 2011, about half of emergency department visits could have been treated or prevented by timely access to primary care. To provide a less expensive alternative to emergency department care, some communities have located a primary care clinic near their local emergency departments to divert non-emergent care away from the emergency department.²⁵ Having an after hours primary care clinic located near the emergency department can provide an alternative to the emergency department. Given the cost and investment of resources needed to locate and staff a primary care clinic best practices and the feasibility of this opportunity should be explored more.

CO-LOCATE OR INTEGRATE PRIMARY CARE, SPECIALTY CARE, & PHARMACY SERVICES

Key Finding: Navigation of the healthcare system; Lack of access to dental & behavioral health providers

Coordination of care across multiple agencies in a complex system and transportation were two major barriers to providing and accessing medical care described by residents and community clinic workers. Additionally, some participants in focus groups expressed interest in being able to access a variety of health-related services in one location. The colocation or integration of primary care and specialty care, especially behavioral health services, could make health care workers' coordination of care across specialties less complex while making it easier for patients to follow through on physician referrals and decreasing patients' transportation burdens. Attention should be paid to best practices of co-location and integration during the co-location or integration process.

INCREASE ACCESS TO TRAINED CASE MANAGERS & COMMUNITY HEALTH LEADERS

Key Finding: Navigation of the healthcare system

Currently, case managers (who assess patient's needs and facilitate the coordination of care) and other community health workers, such as lay health leaders (trained community members who are not medical professionals) and parish nurses (trained nurses who work in faith communities, are helping residents navigate the complex health care system. These case managers and community health leaders are trained to assist residents with referral follow-throughs and connecting them to appropriate community resources. Forsyth Futures found that many Forsyth County residents get information about health care options by word of mouth. Increasing the use of community health leaders can capitalize on the community connections that already exist in the community.

DESIGN A COMMUNITY EDUCATION PROGRAM TO INCREASE UNDERSTANDING OF THE HEALTH CARE SYSTEM

Key Finding: Navigation of the healthcare system

A lack of health literacy and understanding of the best way to access primary care was found to be a major barrier to care in Forsyth County. The community should investigate best practices to design a health education program to improve health literacy and understanding of the health care system, potentially utilizing the existing health education infrastructure. These education programs should focus on topics such as: providing residents with a basic understanding of terminology commonly used by doctors in self-care instructions, what kinds of questions patients should ask providers, how and when to access different kinds of health care resources—such as primary care and the emergency department, and information on what health care resources are available locally. Forsyth Futures' research found that information about health care resources is passed along by word of mouth in many communities, a factor that education programs may want to capitalize on by using educators who are embedded in the community.

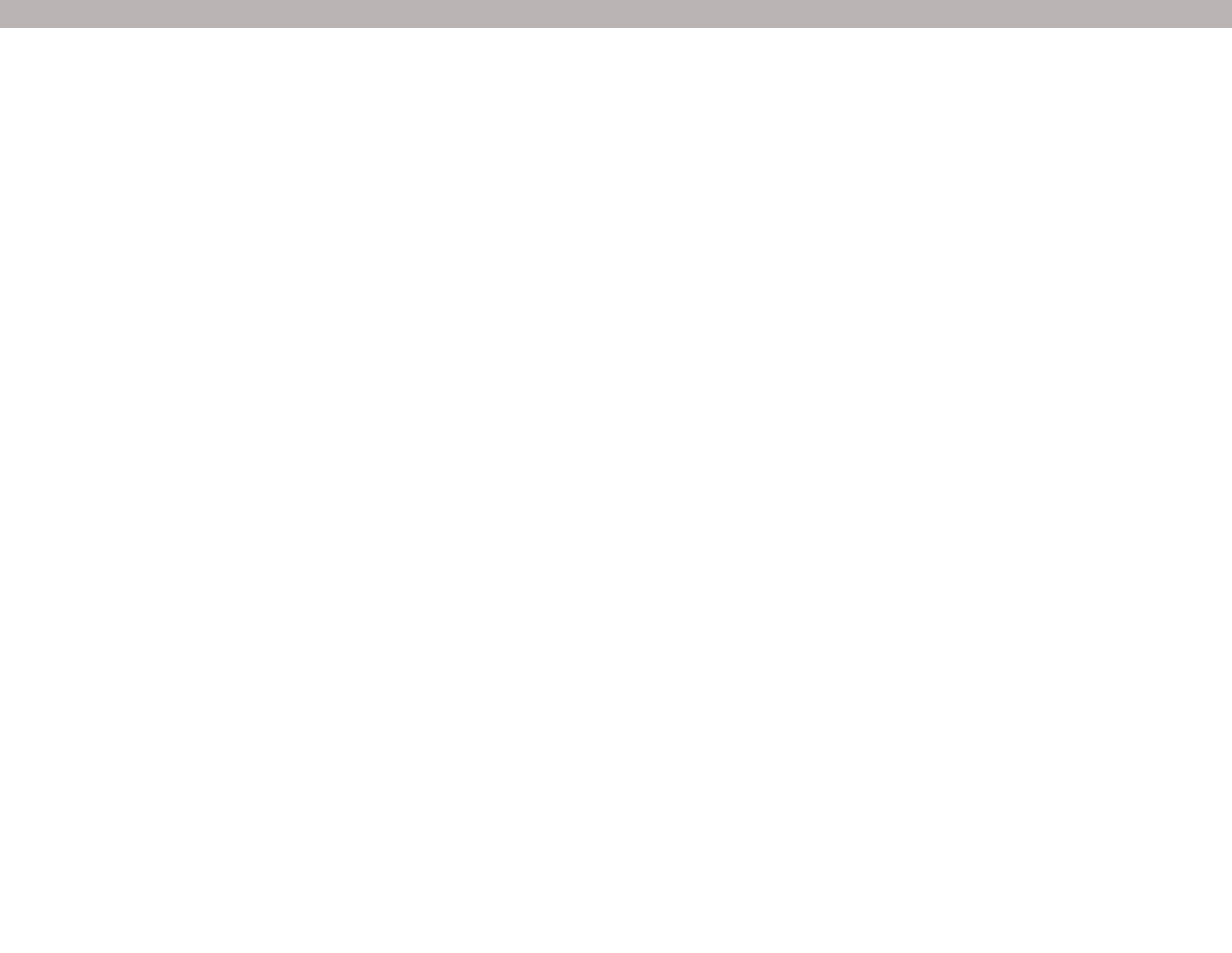
DATA SOURCES

INDICATORS	MEASURE	SOURCE
Insurance Rate	Uninsured population	Small Area Health Insurance Estimate (SAHIE) for Counties and States. United States Census Bureau (2008-2012). www.census.gov/did/www/sahie/
	Medicare coverage	Insurance Coverage. 3-Year Estimate American Community Survey 2010-2012. United States Census Bureau. factfinder2.census.gov/
	Medicaid beneficiaries	"Medicaid Demographics by Census Tract" N.C. Community Health Information Portal. Community Care Network of North Carolina. nchip.n3cn.org/
Health Professionals	Primary care physicians	NC Health Professions Data System. Cecil G. Sheps Center for Health Services Research University of North Carolina at Chapel Hill. www.shepscenter.unc.edu/hp/
	Dentists	
	Psychiatrists	
	Primary care providers accepting medicaid	Personal communication with staff at Northwest Community Care Network. 2 May 2014
Community Clinic	Number of community clinics	Number determined through interviews, focus groups, and internet research.
	Barriers to community clinics	Interviews with community clinic staff.
	Challenges	Interviews with community experts and focus groups.
Behavioral Health Safety Net	Behavioral health programs	Forsyth Futures' Initiascape resesarch, all data is point in time
	Behavioral Health ED visits	Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center.
Dental Health Safety Net	Dental safety net clinics and programs	"Forsyth County Dental Health Coalition: A Report to the Kate B. Reynolds Charitable Trust." Safety Net Solutions. 28 February 2014. Forsyth Futures' Initiascape resesarch, all data is point in time
	Dentists accepting Medicaid	"Forsyth County Dental Health Coalition: A Report to the Kate B. Reynolds Charitable Trust." Safety Net Solutions. 28 February 2014.
	Oral health related ED visits	Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center.
Primary Care Resource Utilization	Primary place of care	Forsyth Futures surveys and focus groups
Emergency Department Utilization	Rate of ED visits	Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center.
	Primary care treatable or preventable visits	Personal communication with Novant Forsyth Medical Center and Wake Forest Baptist Medical Center. Calculated using the NYU Algorithm
Barriers to Care	Reasons for Delaying Care	Forsyth Futures survey, interviews and focus groups
	Reasons for missing an appointment	
General Population data	Used to calculate rates	Bridged-Race Population Estimates. CDC WONDER. Center for Disease Control. Department of Health and Human Services. http://wonder.cdc.gov/

END NOTES

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- ³ “Introduction.” North Carolina Institute of Medicine. January 2013. Accessed 26 July 2014. www.nciom.org/wp-content/uploads/2013/01/FULL-REPORT-2-13-2013.pdf
- ⁴ “What is the Doughnut Hole?” AARP. doughnuthole.aarp.org/.
- ⁵ “The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid.” The Henry J. Kaiser Family Foundation. April 2, 2014. kff.org/health-reform/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/
- ⁶ “How the Health Care Law is Making a Difference for the People of North Carolina.” U.S. Department of Health & Human Services. www.hhs.gov/healthcare/facts/bystate/nc.html.
- ⁷ Op. cit., The Henry J. Kaiser Family Foundation.
- ⁸ Shortage Designation: Health Professional Shortage Areas & Medically Underserved Areas/Populations. Health Resources and Services Administration, U.S. Department of Health and Human Services. Accessed 1 October 2104. www.hrsa.gov/shortage/.
- ⁹ Ibid.
- ¹⁰ Appendix E: Description of Safety Net Organizations. North Carolina Institute of Medicine. January 2013. Accessed 26 July 2014. www.nciom.org/wp-content/uploads/2013/01/FULL-REPORT-2-13-2013.pdf.
- ¹¹ “About” HealthCare Access. www.hcaccess.org/wordpress/.
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- ¹³ Ibid. p12
- ¹⁴ Ibid. p12
- ¹⁵ “340B Drug Pricing Program.” Health Resources and Services Administration. U.S. Department of Health and Human Services. www.hrsa.gov/opa/.
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- ¹⁷ Emergency Medical Treatment and Labor Act. American College of Emergency Physicians. www.acep.org/News-Media-top-banner/EMTALA/.
- ¹⁸ NYU ED Algorithm. NYU Center for Health and Public Service Research. wagner.nyu.edu/faculty/billings/nyued-download
- ¹⁹ A Texas First: Mi Escuelita and MyChildren's Telemedicine Project. Accessed 2 December 2014. Mercado Bilingue. <http://mercadobilingue.com/a-texas-first-mi-escuelita-and-mychildrens-telemedicine-project/>
- ²⁰ Guo, J.J., Wade, T.J., Pan, W., Keller, K.N. (2010). School-based health centers: cost-benefit analysis and impact on health care disparities. *American Journal of Public Health*, Sep; 100(9), 1617-23.
- ²¹ McConnochie, K.M., Wood, N.E., Herendeen, N.E., ten Hoopen, C.B., Roghmann, K.J., (2010). Telemedicine in urban and suburban childcare and elementary schools lightens family burdens. *Telemedecine and E-Health*, Jun; 16(5): 533-42.
- ²² McConnochie, K.M., Wood, N.E., Kitzman, H.J., Herendeen, N.E., Roy, J, Roghmann, K.J. (2005). Telemedicine reduces absence resulting from illness in urban child care: evaluation of an innovation. *Pediatrics*, May; 115(5):1273-82.
- ²³ Chenoweth, D.H., Garrett, J. (2006). Cost-effectiveness analysis of a worksite clinic: is it worth the cost? *American Association of Occupational Health Nurses*, Feb; 54(2): 84-9.
- ²⁴ Ferguson, L.A. (1996). Enhancing health care to underserved populations: a model for the occupational nurse practitioner. *American Association of Occupational Health Nurses*, Jul; 44(7):332-36.
- ²⁵ Personal communication with the Kate B. Reynolds Charitable Trust Staff.



APPENDIX A. DEFINITIONS

340B DRUG PRICING PROGRAM: The 340B Program allows eligible safety net health care providers to obtain low-cost medications, so that they can expand the type and volume of care they provide to the most vulnerable patient populations. Source: Health Resources Services Administration. U.S. Department of Health and Human Services. “340B Drug Pricing Program.” www.hrsa.gov/opa/index.html.

COMMUNITY CLINIC: A medical clinic that provides primary health care services for free, or on a sliding scale, to residents who are uninsured, underinsured, or who do not have adequate financial resources for health care. There are two types of community clinics: Larger community clinics that operate like traditional doctor’s office and smaller community clinics, or drop-in clinics, that do not take appointments and tend to have fewer resources and limited hours.

DROP-IN CLINIC: A smaller community clinic that does not take appointments. These clinics are typically faith-based with fewer resources and usually are open only a few times a month.

FEDERALLY QUALIFIED HEALTH CENTER (FQHC): FQHC Safety Net providers improve the provision of primary care services in underserved urban and rural communities and include community health centers, public housing centers, outpatient health programs funded by the Indian Health Service, and programs serving migrants and the homeless. Source: Department of Health and Human Services. Centers for Medicare & Medicaid Services. Medicare Learning Network. January 2013. www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/fqhcfactsheet.pdf.

HEALTH PROFESSIONAL SHORTAGE AREA (HPSA): The Department of Health and Human Services provides guidelines for what constitutes an adequate supply of primary care, dental care, and mental health providers. The ratio of provider to residents provides targets for adequate supplies of health providers. When more residents are served by a provider than the target ratio, there is a health professional shortage area. Source: Shortage Designation: Health Professional Shortage Areas & Medically Underserved Areas/Populations www.hrsa.gov/shortage/

NEW YORK UNIVERSITY (NYU) ALGORITHM: The NYU Center for Health and Public Service Research worked with ED and primary care physicians to examine a sample of almost 6,000 full ED records and developed an algorithm to help classify ED utilization. The records were classified as non-emergent; emergent primary care treatable; emergent that required ED care, but could have been prevented with primary care; and emergent. Source: NYU Wagner. Background/Introduction. wagner.nyu.edu/faculty/billings/nyued-background

PARAMEDICINE: Paramedicine expands the role of specially trained emergency medical service (EMS) providers who may care for patients at home or in other non-urgent settings outside of a hospital under the supervision of a physician or advanced practice provider. Source: Patterson, Davis G. and Skillman, Susan M. “National Consensus Conference on Community Paramedicine: Summary of an Expert Meeting.” University of Washington School of Medicine. Department of Family Medicine. October 1-2, 2012. Atlanta, Ga. communityparamedic.org/Portals/CP/NCCCP/2012%20NCCCP%20Consensus%20Conference%20Summary.pdf.

PRIMARY CARE PREVENTABLE: "The diagnosis required emergency department care, but the condition could have been prevented with timely and effective primary care during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure, etc.)" Source: NYU Wagner. Background/Introduction. wagner.nyu.edu/faculty/billings/nyued-background

PRIMARY CARE TREATABLE: Care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and procedures or resources needed are available in a primary care setting (e.g., CAT scan or certain lab tests). Source: NYU Wagner. Background/Introduction. wagner.nyu.edu/faculty/billings/nyued-background

TELEMEDICINE: Using electronic communication to exchange a patient's medical information to improve a patient's clinical health status, including two-way video, email, smart phones, wireless tools, etc. Source: American Telemedicine Association. "What is Telemedicine?" www.americantelemed.org/about-telemedicine/what-is-telemedicine#.VG4ESKM05Hg

APPENDIX B. CONSUMER SURVEY

About This Survey: Forsyth Futures, a local non-profit community research organization, is conducting a survey to understand how Forsyth County residents use health care. We would like you to complete this survey. Your answers will be anonymous. Your answers will be combined with other people's answers in any reports from this survey.

Answering these questions is your choice. Your answers will not affect your ability to get health care. Please answer the questions truthfully. Skip any questions that you are not comfortable answering.

PLEASE ONLY COMPLETE ONE SURVEY PER FAMILY.

About You:

1. Do you live in Forsyth County?

- No
- Yes
- Not Sure

Stop now. Thank you for your help.

Go on to question 2

2. What is your zip code?

3. How many people (including children) in your family live in your household? Include yourself.

4. Think of the person in your household, including yourself, who has had the most recent birthday. Write down his/her initials to help you remember who that is. **Answer the rest of the questions for this person.**

About person from question 4:

5. Age: _____

6. Main language spoken at home: _____

7. Is this person Hispanic or Latino?

- Yes
- No

8. What is this person's race? (Mark one or more)

- American Indian or Alaskan native
- Asian or Pacific islander
- Black or African American
- White
- Other: _____

9. Gender:

- Man/Boy
- Woman/Girl
- Other: _____

10. Highest level of school completed:

- Less than a high school degree
- A high school degree (including a GED)
- Some college (including a vocational program or associate's degree)
- A bachelor's degree
- A graduate or professional degree

11. Working status:

- Working for pay at a job or business --> **for ____ hours in a typical week**
- Looking for work
- Working, but not for pay, at a family-owned job or business (for example: working at a family farm or store)
- Not working at a job or business and not looking for work (for example: student, stay-at-home parent, on disability, etc.)
- Other: _____

12. Does the person described on the first page have any kind of health insurance?

Yes

No

If yes, what kind of health insurance does he/she have?

Private insurance (for example: employer-based insurance, Blue Cross Blue Shield, etc.)

Medicaid

Medicare

Health Choice

VA Health Benefits

Indian Health Services

Other _____

Not Sure

13. Is there a place in Forsyth County that this person USUALLY goes to when he/she is sick or needs advice about his/her health?

This place is not in Forsyth County.

Yes

If yes, what kind of place does this person go MOST OFTEN? PLEASE CHOOSE ONLY ONE.

A free or low-cost clinic

Doctor's office, HMO, or health center

Hospital emergency room

An urgent care center

Other: _____

There is NO place.

If no, what is the MAIN REASON this person does not have a usual source of medical care? PLEASE CHOOSE ONLY ONE.

Doesn't need a doctor/hasn't had any problems

Person or caregiver doesn't like/trust/believe in doctors

Person or caregiver doesn't know where to go

Previous doctor is not available/moved

Person recently moved to this area

Just changed insurance plans

No health insurance

Cost of medical care

Can't find a provider who speaks this person's language

No care available/Care too far away, not convenient

Put it off/Didn't get around to it

Goes different places for different healthcare needs

Other: _____

14. There are many reasons people delay getting medical care. Has this person delayed or not gotten care for any reason in the past year? For example, not seeing a doctor, getting a test, or taking medicine or some other treatment that a doctor or this person thought he/she needed.

Yes

If yes, think about the most recent time that this person delayed or did not get care. What was the main reason this person delayed or did not get care?

PLEASE CHOOSE ONLY ONE.

- Couldn't get through on the telephone
- Couldn't get an appointment soon enough
- Once he/she got there, he/she had to wait too long to see a doctor
- The clinic/doctor's office wasn't open when he/she got there
- Didn't have transportation
- Person or caregiver doesn't like/trust/believe in doctors
- No health insurance
- Insurance company wouldn't approve, cover, or pay for care
- Couldn't afford care
- Couldn't take time off work
- Was refused services
- Couldn't get child care
- Embarrassed to get this care
- Couldn't find a provider who speaks this person's language
- Was worried about getting bad news
- Thought the doctor would do something uncomfortable, like draw blood
- Other: _____

No

Not Sure

15. During the past year, has this person been unable to keep a doctor's appointment as scheduled?

Yes

If yes, think about the most recent time this person missed a doctor's appointment. What was the MAIN REASON he/she was unable to keep this appointment? PLEASE CHOOSE ONLY ONE.

Once he/she got there, he/she had to wait too long to see a doctor

Didn't have transportation

Couldn't afford care

Couldn't take time off work

Couldn't get child care

Embarrassed to get this care

Was worried about getting bad news

Thought the doctor would do something uncomfortable, like draw blood

Forgot the appointment

Felt better before the appointment

Does not feel respected by doctor or staff

Other

No

Not Sure

APPENDIX C. ACCESS TO HEALTH CARE INITIASCAPE LIST

TABLE 5. Access to Health Care Initiascape full list

PROGRAM	ORGANIZATION	PROGRAM	ORGANIZATION
A Sure House	A Sure House	Cleveland Avenue Dental Clinic	
Medical Case Management	AIDS Care Service	Family Planning - Teen Clinic	
Amos Cottage	Amos Cottage	Family Planning Clinic	
Addiction Recovery Care Association	ARCA	Forsyth County Department of Public Health	
Associates in Christian Counseling	Associates in Christian Counseling	Pharmacy	
Barium Springs Home For Children	Barium Springs Home For Children	Forsyth County Department of Public	
Health & Wellness Clinic of the Triad Region	Bethany Baptist Church	Health: Refugee Clinic	
Cancer Services, Inc.	Cancer Services, Inc.	Forsyth County Department of Public	
Love Thy Neighbor	Centenary United Methodist Church	Health: Well Child Clinic	
Patient Assistance Program		Health Check	
CenterPoint Human Services	CenterPoint Human Services	School Health	
Community Care Center		TB Skin Testing Clinic	Forsyth County Department of Public
Med-Aid Pharmacy	Community Care Center	Teen Initiative Project (TIP)	Health
Community Choices, Inc./WISH	Community Choices, Inc.	WomanWise Program	
Triad Free Health Clinic	Community Mosque	The Nurse-Family Partnership Initiative	
Pharmacy	Crisis Control Ministry	Care Coordination for Children (CC4C)	
Daymark Recovery Services	Daymark Recovery Services	Healthy Beginnings	
Epilepsy Institute of North Carolina	Epilepsy Institute of North Carolina	Healthy Start/ Baby Love Plus	
	Prevention fo Child Abuse of North	HIV Counseling & Testing	
Exchange Club Center	Carolina, Inc.	Immunization Clinic	
Family Services, Inc.	Family Services, Inc.	Pregnancy Care Management	
Forsyth County Dental Society	Forsyth County Dental Society	School Age Dental Health Program	
		Sexually Transmitted Disease Clinic	
		Tuberculosis Control Clinic	
		Women Infant & Children (WIC)	
		Dental Education Clinic	Forsyth Technical Community College
		HealthCare Access	HealthCare Access
		Hospice & Palliative CareCenter	Hospice & Palliative CareCenter
		Iglesia Cristiana Wesleyana Dental Clinic	Iglesia Cristiana Wesleyana

ACCESS TO HEALTH CARE INITIASCAPES LIST, CONT.

PROGRAM	ORGANIZATION
Mental Health Association In Forsyth County	Mental Health America
Youth Mental Health First Aid Training	Mental Health First Aid USA
Monarch	Monarch
Partners in Health and Wholeness	North Carolina Council of Churches
Winston-Salem Missions of Mercy (MOM) Dental Clinic	North Carolina Dental Society
Behavioral Services	
ED-Forsyth Medical Center	Novant Health
Wellness Programs & Services	
Today's Woman OB GYN	
The Old Town Baptist Medical Mission	Old Town Baptist Church
Insight Human Services	Partnership for Drug-Free NC
Winston-Salem Health Center	Planned Parenthood Health Systems
Planned Parenthood: Rapid HIV Testing	Planned Parenthood Winston-Salem Health Center
Prodigals Community	Prodigals
'Por Una Vida Mejor' Community Health Fair	Que Pasa Media
Neighborhood Clinic: Winston-Salem Rescue Mission Dental Clinic	Samaritan Medical Clinics
Southside Medical Clinic	
School Health Alliance for Forsyth County	
Bulldog Health Center at Mineral Springs	
Winston-Salem Preparatory Academy Wellness Center	School Health Alliance for Forsyth County
Mental Health Consultation Clinic at WSPA	
Ashley Elementary School Wellness Center	
Southside United Health and Wellness Center	Southside United Health and Wellness Center
Reynolda Counseling Services	The Children's Home
Free Medical Clinic and Pharmacy	The Shalom Project

PROGRAM	ORGANIZATION
Congregational Nurse and Health Ministry Program	The Shepherd's Center of Greater Winston-Salem
Project Senior Smiles Dental Clinic	The Shepherd's Center of Kernersville
Share the Health Fair	Wake Forest School of Medicine
Delivering Equal Access to Care: DEAC, Geriatric Psychiatry Outreach	
CareNet Counseling	
OPD Clinics	
Bowan Gray Child Guidance Center	
Homeless Opportunities and Treatment (HOT) Project	
ED-Wake Forest Baptist Health	
Northwest Community Care Network	
Screening, Brief Intervention and Referral to Treatment (SBIRT)- NW Community Care Network	Wake Forest Baptist Medical Center
Pediatrics Winston East	
The Ryan White HIV Primary Care and Infectious Diseases Specialty Clinic	
Children's Developmental Service Agency (CDSA): Part C of IDEA	
Brenner Fit	
Downtown Health Plaza	
FaithHealth	
Northwest AHEC	
Medical Clinic	Winston-Salem Rescue Mission
Alpha Acres	
RAMS Know H.O.W. Mobile Unit	Winston-Salem State University
Youth Opportunities	Youth Opportunities
Hawley House	YWCA

ACCESS TO HEALTH CARE INITIASCAPES LIST, CONT.

TABLE 6. Programs for Medication Assistance Safety Net

PROGRAM	ORGANIZATION
Medical Case Management	AIDS Care Service
Love Thy Neighbor	Centenary United Methodist Church
Patient Assistance Program	CenterPoint Human Services
Med-Aid Pharmacy	Community Care Center
Pharmacy	Crisis Control Ministry
Epilepsy Institute of North Carolina	Epilepsy Institute of North Carolina
Pharmacy	Forsyth County Department of Public Health
340 B	Novant Health Forsyth Medical Center
Pharmacy	The Shalom Project
The Ryan White HIV Primary Care and Infectious Diseases Specialty Clinic	Wake Forest Baptist Medical Center
340 B	

TABLE 8. Programs for Dental Health Safety Net

PROGRAM	ORGANIZATION
Love Thy Neighbor	Centenary United Methodist Church
Cleveland Avenue Dental Clinic	Forsyth County Department of Public Health
School Age Dental Health Program	
Dental Education Clinic	Forsyth Technical Community College
Dental Clinic	Iglesia Cristiana Wesleyana
Winston-Salem Missions of Mercy (MOM) Dental Clinic	North Carolina Dental Society
Winston-Salem Rescue Mission Dental Clinic	Samaritan Medical Clinics
Give Kids a Smile	The American Dental Association
Project Senior Smiles Dental Clinic	The Shepherd's Center of Kernersville

TABLE 7. Programs for Behavioral Health Safety Net

NAME	PARENT ORGANIZATION
A Sure House	A Sure House
Addiction Recovery Care Association	Addiction Recovery Care Association
Amos Cottage	Amos Cottage
Associates in Christian Counseling	Associates in Christian Counseling
Barium Springs Home For Children	Barium Springs Home For Children
CenterPoint Human Services	CenterPoint Human Services
Community Choices, Inc./WISH	Community Choices, Inc.
Daymark Recovery Services	Daymark Recovery Services
Family Services, Inc.	Family Services, Inc.
Friendship Vision House	Friendship Vision House
Mental Health Association In Forsyth County	Mental Health America
Youth Mental Health First Aid Training	Mental Health First Aid USA
Monarch	Monarch
Behavioral Services	Novant
Insight Human Services	Partnership for Drug-Free NC
Prodigals Community	Prodigals
Mental Health Consultation Clinic at Winston-Salem Preparatory Academy	School Health Alliance for Forysth County
Reynolda Counseling Services	The Children's Home
Bowman Gray Child Guidance Center	
CareNet Counseling	
OPD Clinic	Wake Forest Baptist Medical Center
Homeless Opportunities and Treatment (HOT) Project	
Geriatric Psychiatry Outreach	
Share the Health Fair	Wake Forest School of Medicine
Alpha Acres	Winston-Salem Rescue Mission
Youth Opportunities	Youth Opportunities
Hawley House	YWCA

APPENDIX D. CASE STUDIES

ADVANCE PRACTICE PARAMEDIC (APP)

Wake County Emergency Medical Services (EMS) implemented the Advance Practice Paramedics (APP) program in 2009. In the APP, paramedics conduct home visits to people with conditions that need close monitoring, such as diabetes, high blood pressure, congestive heart failure, increased risk of falls and asthma. The home visits reduce the medical crises from these populations. Advanced Paramedics also may redirect care to other facilities for mental health or substance abuse patients who do not need to be seen in the emergency room. Within the first six months of the APP program, Wake APP had referred 167 patients, returning approximately 2,400 bed-hours to local emergency departments. They are also available on critical level calls. www.wakegov.com/ems/about/staff/Pages/advancedpracticeparamedics.aspx

HALIFAX REGIONAL MEDICAL CENTER & RURAL HEALTH GROUP

In 2013, Halifax Regional Medical Center partnered with Rural Health Group, a non-profit federally qualified community health provider, to open a community clinic in the hospital emergency room, the first of its kind in North Carolina. Healthy Places NC, an initiative of the Kate

B. Reynolds Charitable Trust, provided resources for the clinic, equipment and staff. The hospital struggled with an over-burdened 24-bed emergency room. It documented that at least 23 percent of the patients did not require emergency care, and 65 percent of those visits occurred between 4 and 9 p.m. The hospital recognized that these patients would be better served in an outpatient clinic setting where they would be encouraged to learn about preventative care and healthier life-styles. At the end of three years, the project expects that 3,000 new patients will visit a primary care doctor at the Center, and Halifax Regional will see a drop in inappropriate emergency room visits by at least 6,000 patient visits. The Center is open from 1-9 p.m. and is adding a second doctor. *Source: Personal communication with the Kate B. Reynolds Charitable trust staff*

WORK BASED CLINICS

Hanes Brands, Winston-Salem, N.C.

In 2010, Hanes Brand opened a free on-site clinic for its employees. This clinic serves as a primary care provider for employees and also treats minor illnesses or occupational injuries. The doctors and nurses at the clinic help with the maintenance of long-term, chronic illnesses like diabetes. Doctors prescribe medications for the employees, who also

CASE STUDIES, CONT.

have access to a wellness coach. The Vice President of Compensation and Benefits said that she sees co-pays as a barrier to care, and that is the reason that access to the clinic is free. A representative of CHS Health Services, the outside contractor that runs the Hanes employee clinic, said that by the third year of having an on-site clinic, most companies see close to \$3 in savings for every \$1 that is spent on the clinic. These savings come from fewer hours lost from employees taking time off work for doctors' appointments and from early identification of chronic diseases. *Sources: online. wsj.com/news/articles/SB10001424127887324867904578595913843743822; abcnews.go.com/Business/workplace-clinics-lower-healthcare-costs/story?id=19682535*

SAS Institute, Cary, N.C.

SAS Institute in Cary, NC, has an on-site health center available to current employees and their families, as well as for SAS US retirees. For current employees and their family members, the health center offers many services that an outside primary care facility or medical care facility would normally provide, including allergy shots, consultation with a dietitian, physical therapy, blood work, and seeing a psychotherapist. For many of these families, the health center at SAS is their medical home. The employees have an insurance plan and may choose an external provider, but many

choose the facility on campus. At the health center, there are no fees for service or co-pays, and this encourages extra testing and treatment for the patients. For SAS US retirees, they may use the health center for immunizations and lab work if ordered by a community health worker. *Sources: sloanreview.mit.edu/article/do-it-yourself-employee-health-care/; www.sas.com/en_us/company-information/employee-retiree-services.html#for-retirees*

FAITH IN ACTION CARE PROGRAM

One of the roles for volunteers in the Faith in Action Care Program of the Shepherd's Center of Greater Winston-Salem is to provide medical transportation to homebound older adults age 60 and over in the greater Winston-Salem area. The program also provides transportation for residents below 60 who have transportation needs due to physical or mental disabilities. Services are provided by trained volunteers of all ages from area congregations, organizations and the community. Volunteers are reimbursed for gas expenses. The Shepherd's Center provides training for young and older adults who can provide non-medical support for homebound individuals. The Shepherd's Center also provides taxi vouchers to be used for transportation to medical appointments for people who lack a vehicle or other resources for

transportation.

In 2013, volunteers responded to 2,006 requests for medical transportation, which resulted in 1,016 rides provided by volunteers and 553 provided by taxi service. (The other requests were cancelled for various reasons, such as the person got another ride, the doctor changed the appointment, the person didn't feel like going or forgot the appointment, etc.) *Source: www.shepherdscenter.org/interfaith.html*

CONGREGATIONAL NURSE AND HEALTH MINISTRY

The Shepherd's Center of Greater Winston-Salem leads the volunteer-based Congregational Nurse and Health Ministry Program of Forsyth County. The program is open to any congregation, welcomes religious and ethnic diversity and strives to meet the needs of the under-served in the community. Volunteer registered nurses in the program coordinate a ministry of health and wholeness within the congregations they serve and tailor their ministries to meet the congregation's unique needs. Nurses may provide wellness education, health screenings, assessments of the physical, mental and spiritual needs of congregational members, and counseling on healthcare and caregiving issues. In 2013, 60 congregations participated in the Congregational

Nurse and Health Ministry, which served 9,653 people and touched 26,639, according to the Shepherd's Center website. *Source: www.shepherdscenter.org/news/2013%20Program%20Summary%20At%20a%20Glance.pdf*

CORPORATE HEALTH & WELLNESS

Through Forsyth Medical Center, Novant Health offers a health program to local companies. Representatives from Novant work with organizations to develop a custom program that can include, but is not limited to employee screenings and health risk assessments, on-site wellness centers, and programs to assist with tobacco cessation, stress management and weight loss. Use of these services can result in a reduced healthcare costs for the company, as well as increase access to basic primary care services for employees. *Source: www.novanthealth.org/home/services/corporate-health--wellness.aspx*

SUPPORTERS OF HEALTH

In 2013, Wake Forest Baptist Health and FaithHealth NC cross-trained outsourced environmental service workers as community health workers. These "Supporters of Health"

participated in training on how to navigate the safety net and HIPAA compliance and learned how to engage with local safety net programs such as Crisis Control Ministry, Downtown Health Plaza, food pantries, HealthCare Access, the HOT Project and other partners. In their first 60 days, the Supporters of Health saw 110 people and helped them understand healthcare coverage, food resource issues and home care. About 65 people in that first group of clients were uninsured; 20 had Medicaid; approximately 10 had Medicaid and Medicare. Clients came primarily from zip codes 27105 and 27101. The Supporters of Health made phone calls, home visits, and hospital visits. A large part of their service was enrolling people for Medicaid, and the estimated potential savings in revenue was \$58,000. They also enrolled people in nutritional programs, like Meals on Wheels, and helped with bill assistance and housing needs. They also helped manage expectations about what help is available. *Source: Personal communication with Faith Health NC staff.*

TELEMEDICINE

In 2013, MyChildren's pediatric clinic based in Dallas, Texas started a pilot program for telemedicine in a Mi Escuelita preschool. The preschool has an on-site nurse, who uses video, audio, and diagnostic equipment to examine a child, and a doctor or nurse practitioner at an off-site clinic can see what the on-site nurse is seeing. The doctor can recommend non-emergency care and can also order prescription medicine for the parent to pick up at the pharmacy. The preschool's health specialist said that having the telemedicine in the schools is good because the parents do not have to miss work. *Sources: miescuelita.org/wp-content/uploads/2013/12/Full-Annual-Report.pdf*