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PUBLIC HEALTH PRACTICE

Improving rural access to care: Recommendations for Georgia's health care safety net

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Corresponding Author: John Butts, MPH • 55 Park Place, NE, Atlanta, GA 30303 • 404-413-0283 • jbutts@gsu.edu**ABSTRACT**

Background: In Georgia, the safety net provides health care services to vulnerable populations scattered across 74 urban and 85 rural counties. In rural communities, the safety net is challenged with longstanding gaps in service provision and persistent difficulty in making services accessible. The rural safety net in Georgia is vulnerable.

Methods: An environmental scan was conducted of the Georgia rural safety net to assess who it serves, its providers, and how care is accessed in light of the Affordable Care Act (ACA). The scan included analysis of population-based census and health databases and a literature review to inform recommendations.

Results: The population served by the rural safety net is typically older, poorer, and less healthy than the population in urban areas. The principal providers of care in the rural safety net are community hospitals, federally sponsored and free or charitable clinics, and some health departments. While the ACA provides an opportunity to increase insurance coverage and access to care, it poses a financial challenge to providers of the rural health safety net. As the health system evolves, the rural health safety net must adapt to shifting priorities and patient populations.

Conclusions: To enhance the sustainability of the rural safety net, it is necessary for providers to focus on coordination of care through integration of services and broader health system partnerships. Providers of the Georgia rural safety net and stakeholders should focus on (a) ensuring a comprehensive assessment of all components of the safety net, (b) facilitating change through high-performing health departments and community-based organizations, (c) funding efforts to provide patient-centered medical homes for the rural uninsured, (d) emphasizing the value of technology in the provision of care and information/data exchange, and (e) rewarding innovations in rural and safety net workforce development and deployment.

Keywords: safety net, rural, health needs assessment, health care services, workforce development, data exchange, information technology

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INTRODUCTION

The health care safety net is a multi-layered system of health care professionals who provide care to the most vulnerable segments of a community's population. The most commonly used definition comes from the Institute of Medicine (IOM) report *America's Health Care Safety Net: Intact but Endangered*, which 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 patients" (Lewin & Altman, 2000). The report further characterizes the core safety net providers present in most communities as having either a legal mandate or explicit mission to maintain an "open door," offering access to service for patients regardless of their ability to pay, and a patient mix that is composed of uninsured, Medicaid, and other vulnerable patients (Lewin & Altman, 2000).

The National Advisory Committee on Rural Health expands upon the IOM definition of the safety net by specifying

safety net providers as public or community hospitals, public health departments, Federally Qualified Health Centers (FQHCs), Rural Health Clinics, free clinics, and private health care providers serving low-income and underinsured populations (National Advisory Committee on Rural Health, 2002). There is an alignment between the broader and rural-specific definitions since the core purpose of the safety net is the care for people who are underserved in their communities. However, urban and rural safety nets differ in the structure of their delivery systems and their local context. In the current, rapidly changing health care environment, both urban and rural safety nets face challenges, but the rural safety net has traditionally been in a more tenuous position due to provider shortages, limited resources, aging populations, smaller markets, and high numbers of the under- and uninsured.

METHODS

The primary rural designation used in this report is provided by the Office of Management and Budget (OMB), which

defines counties as Metropolitan (Metro), Micropolitan (Micro), or neither. All counties defined as Metro are urban. Rural counties include Micro counties, as well as those not designated as either Metro or Micro. According to this definition, there are 74 urban counties and 85 rural counties in Georgia (Office of Rural Health Policy, 2014). The OMB approach likely underestimates the number of rural residents in Georgia because sparsely populated, non-urban areas exist in some counties that are designated as Metro. Different datasets employ different methodologies for determining urban versus rural, some of which are reflected in this report.

An environmental scan of the Georgia rural safety net was conducted to assess who it serves and who its providers are. An analysis to define safety net populations was conducted using datasets from the U.S. Census Bureau (American FactFinder and the American Community Survey) and the Georgia Department of Public Health's Online Analytical Statistical Information System (OASIS). Additionally, a literature review was performed to assess the impact of the ACA on coverage and access to care. Recommendations of how to improve access to rural care are defined based on the findings of the environmental scan and a review of literature.

RESULTS

Characterizing the Safety Net in Georgia

Who Does the Safety Net Serve? Regardless of the geographic setting, the safety net, by providing needed services to those who face barriers to accessing affordable care, is an essential part of the health care system at the national, state, and local levels. The health care safety net serves a diverse population of people, including those who are poor, homeless, migrant workers, uninsured or underinsured, and, in many cases, those enrolled in Medicaid (Jones & Sajid, 2009).

The 2010 U.S. Census revealed that Georgia has a total population of 9,687,653 with 81% living in urban areas and 19% living in rural communities (U.S. Census Bureau, 2010). Compared with their rural counterparts, urban areas in Georgia have higher populations of people who are Black, Asian, and Hispanic/Latino (Table 1). Rural areas have an older population, compared to urban areas. In rural areas, 14.2% of the population is over the age of 65 years versus 9.8% of urban residents (Table 1). The rural safety net provides care for these elderly patients, many of whom may be suffering from or managing chronic health conditions, putting an additional strain on already limited resources.

Table 1. Selected demographics for Georgia, urban and rural (2010)

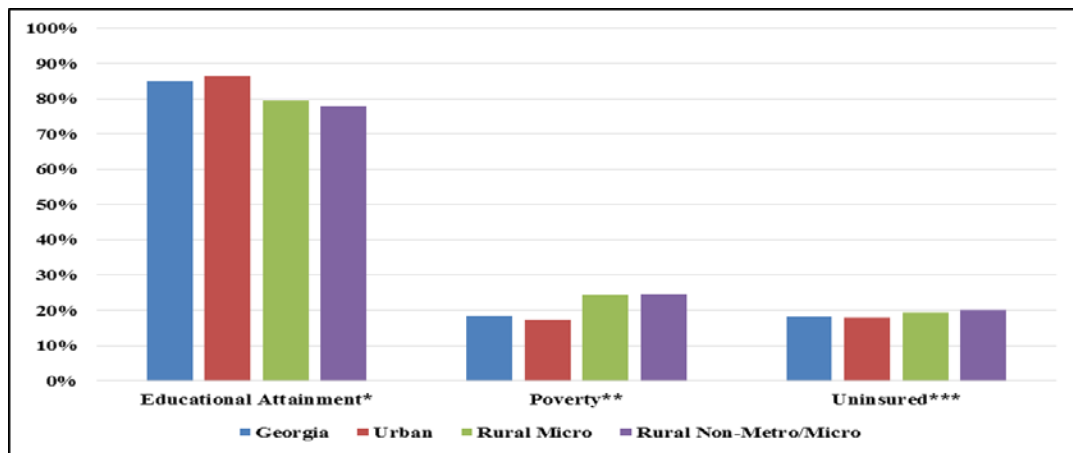
	Georgia	Urban	Rural
Population	9,687,653	7,847,658 (81%)	1,839,995 (19%)
Race			
White	59.7%	57.8%	68.2%
Black	30.5%	31.5%	26.1%
Asian	3.2%	3.8%	0.8%
Other	4.0%	4.2%	3.2%
Hispanic or Latino (of any race)	8.8%	9.5%	5.9%
Age (65 years and older)	10.7%	9.8%	14.2%

Source: U.S. Census Bureau. 2010

The safety net in Georgia provides care to populations that often have lower levels of education, come from impoverished households, and have higher rates of uninsured (U.S. Census Bureau, 2014). Compared to urban residents, rural residents are less likely to have a high school

degree. Furthermore, rural areas, on average, show higher levels of poverty than urban areas and the state (Figure 2). Similarly, a greater proportion of rural residents are uninsured, compared to urban areas and the overall state (Figure 1).

Figure 1. Education, Poverty, and the Uninsured in Georgia, Urban and Rural (2010-2014)



*Percent of people 25 years and older who have completed high school or equivalency

** Percent of people below the poverty level in the past 12 months

*** Civilian, noninstitutionalized population

Source: U.S. Census Bureau. American Community Survey 5-Year Estimates, 2010-2014

The safety net serves a population that is typically less healthy than the general population, with higher rates of obesity, poorer nutrition, less physical activity, higher rates of smoking and alcohol use, higher rates of chronic disease, and lower life expectancy (Morgan, 2002). As a proxy measure of disease morbidity, Georgia’s Department of Public Health collects data on hospital discharges. These

hospital discharges present the disease or condition identified as the principal diagnosis for those exiting acute-care inpatient facilities. Compared to non-rural areas, the hospital discharge rates are higher in rural areas of Georgia for all-cause, major cardiovascular disease, and diabetes (Table 2).

Table 2. Deduplicated, age-adjusted discharge rates in Georgia, non-rural, and rural* (2014)

	Georgia	Non-Rural	Rural
All-Cause	7,787.7	7,666.7	8,309.7
Cardiovascular, Major Disease	1,020.4	1,005.2	1,085.9
Diabetes	133.2	131.0	145.7

* The State Office of Rural Health defines rural as all counties with a population less than 35,000.

Source: Georgia Department of Public Health, 2014

Who are the Safety Net Providers? In Georgia, as with the rest of the country, a broad mix of safety net providers are responsible for delivering health care services to the state’s underserved and uninsured populations. The principal providers of care are community hospitals, federally funded clinics (e.g., FQHCs, Rural Health Clinics), free and charitable care clinics, and some health departments. In addition, community-based health coalitions, school-based clinics, and health care professionals in private practice augment the care that vulnerable populations access and receive throughout the state.

In general, public hospitals account for a substantial proportion of safety net care. Many of these hospitals, especially in urban settings, tend to provide service to uninsured clients and Medicaid beneficiaries (Lewin & Altman, 2000). In Georgia, there are 57 general hospitals that are currently classified as safety net hospitals, as defined by the Georgia Department of Community Health (Rule 111-2-2.20) (Georgia Department of Community Health, 2013). Of these, 33 are located in urban counties; the remainder are scattered across nine of the state’s more rural service delivery regions. Rural safety net hospitals,

including those in Georgia, are vulnerable to closure because of financial pressures resulting from high rates of uncompensated care, particularly in states that have not expanded Medicaid under the ACA, and reimbursement cuts that are especially pronounced given their greater reliance on Medicare and Medicaid reimbursement versus private payers (iVantage Health Analytics, 2016). An additional 35 rural hospitals in Georgia are currently vulnerable to closing (iVantage Health Analytics, 2016).

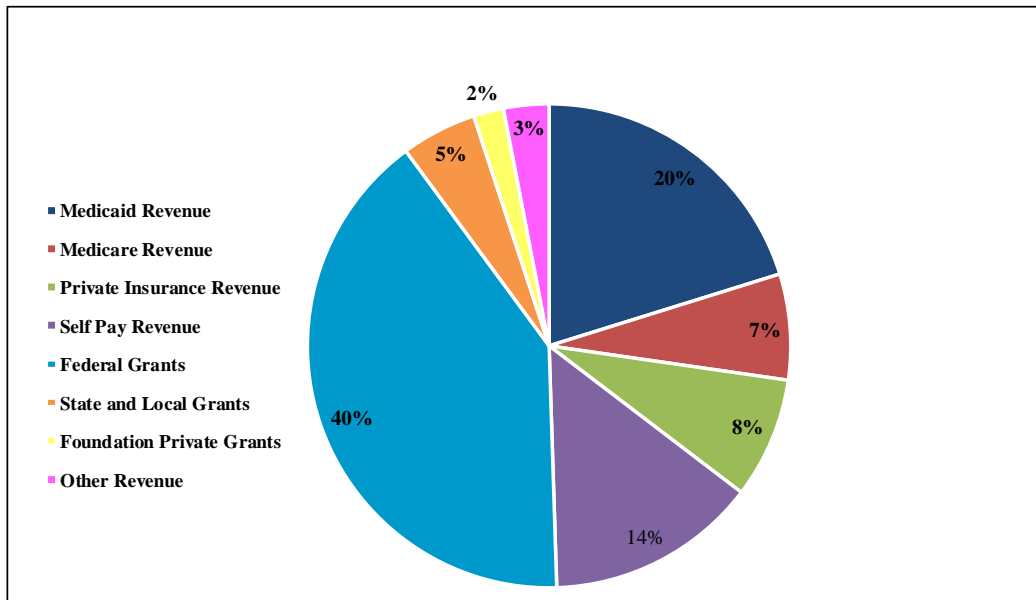
Some Georgia hospitals are designated by the Centers for Medicare & Medicaid Services as critical access hospitals (CAHs; Code of Federal Regulations 42 CFR 485 subpart F). Although this designation is not required to function as a safety net provider, CAH criteria require hospitals to maintain an emergency room and provide medical screening and stabilization treatment services for common medical conditions, regardless of the patient’s ability to pay. Of the 67 rural Georgia hospitals, 34 have been certified as CAHs (Georgia Department of Community Health, 2014). CAHs are more likely to provide a higher percentage of uncompensated care than urban and other rural hospitals (Gale, Croom, Croll, & Coburn, 2015). Since 2013, four

CAHs have closed in Georgia (Georgia Hospital Association, 2016).

According to Section 330 of the Public Health Service Act, FQHCs are outpatient clinics that qualify for specific reimbursement systems under Medicare and Medicaid for providing services in underserved areas, and/or to underserved communities. These services include comprehensive primary and preventive care, regardless of patients' ability to pay or health insurance status. The number of FQHCs continues to increase, from only eight in the 1960s to 1,202 in the United States and its territories in 2013, as determined by the National Association of Community Health Centers (NACHC). In Georgia, according to the NACHC, there are 32 FQHCs operating at 172 sites, which serve more than 370,000 patients, 54% of whom are served by rural organizations (NACHC, 2016). In 2014, 71% of FQHC patients in Georgia were at or below 100% of the federal poverty level, and 47% were uninsured (NACHC, 2016).

Federal funding for FQHCs increased from \$750 million in 1996 to \$2.2 billion in 2010 as part of the American Recovery Act and \$11 billion more in funding appropriated under the ACA for 2011 through 2015. Although there was concern for ongoing funding, Congress allocated a discretionary funding level of \$1.49 billion for the Health Center Program for 2016, which, when combined with the \$3.6 billion in mandatory funding provided through the Medicare Access and CHIP Reauthorization Act, represents a total funding level of \$5.1 billion for the Health Center Program in 2016 (NACHC, 2015). Legislation specifies that at least \$150 million is spent on construction and capital improvements and at least \$200 million is spent on expansions of health center capacity, including new delivery sites and additional services such as oral and behavioral health. Federal funding of FQHCs remains the dominant revenue source for Georgia's FQHCs (Figure 2).

Figure 2. Distribution of Revenue by Source for Federally Funded FQHC's in Georgia, 2013

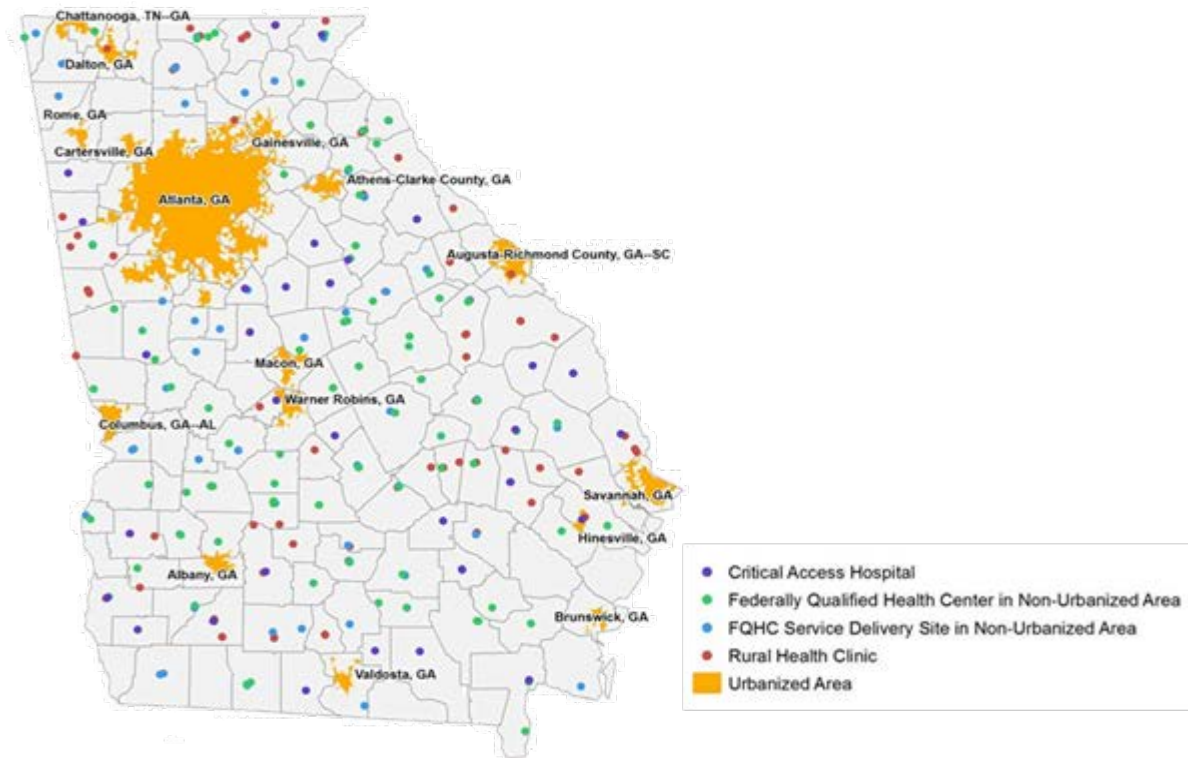


Source: Kaiser Family Foundation, 2015a

Federally sponsored Rural Health Clinics can also serve in the safety net as providers of health care in rural areas without hospitals, although they are not specifically required to see uninsured patients. As of 2015 there were, throughout Georgia, 95 rural health clinics providing services to primarily Medicaid and Medicare populations (Centers for Medicare and Medicaid, 2015).

Free or charitable care organizations usually operate clinics on a part-time basis with substantial engagement of volunteer staff. In Georgia, there are roughly 100 free or charity clinics, located primarily in urban areas, most of

which are supported by faith-based institutions (Georgia Charitable Care Network, 2014). In 2014, charity clinics in Georgia treated about 323,000 adults, providing \$200 million in care to 16% of the state's uninsured population (Georgia Charitable Care Network, 2014). Clinic fees at some centers range between \$5 and \$75, with most providing primary care, health education, and prescription assistance services. Less than half provide dental (46%), vision (46%), and mental health (34%) services. Figure 3 is an overlay showing the rural health care facilities that make up the safety net in rural Georgia (Rural Health Information Hub, 2015).

Figure 3. Map of Selected Rural Health Care Facilities in Georgia, 2015

Source: Rural Health Information Hub, 2015

A limited number of local/county health departments across the country provide direct medical services that are sufficient or comprehensive enough to be recognized as safety net providers. This is true nationally, even in counties with shortages of designated health care providers (Landers, 2016). In 2007, only four of Georgia's 159 county health departments reported providing comprehensive primary care services to uninsured residents; another 10 reported providing limited services through public health nurses and nurse practitioners employed by the department (Georgia Department of Audit and Accounts, 2007).

Challenges and Opportunities for the Rural Safety Net

In rural areas, access to care is a multi-level challenge, particularly for vulnerable populations. Three factors, geography (physical isolation and transportation issues), a lack of financial means (un- and under-insured), and a lack of providers are barriers to accessing care. The changes occurring under the ACA have implications for health and health care in urban and rural communities trying to address issues of access.

The ACA is transforming the delivery of care in communities through a focus on lowering the uninsured rate, improving the quality of care, focusing on prevention and population-level health, and reducing the cost of health care. These trends provide opportunities for the safety net to address the three levels of barriers to accessing care in rural areas by expanding payment for care and improving coordination of care. The ACA addresses expansion of insurance coverage and new reimbursement strategies, and coordination of clinical services can be strengthened

through collaborations among safety net providers and the integration of information technology (IT).

Although the expectation is that ACA will increase insurance coverage and access to care, the safety net will continue to be an integral and relevant part of the system of care, even within the changing health care landscape. A 2011 national poll of opinion leaders in health care delivery and finance asked about the role of the safety net for vulnerable populations after implementation of the ACA. It found that 98% of surveyed leaders feel that, after 2014, traditional safety net providers (e.g., FQHCs, CAHs, and public hospitals) will be needed to care for those who remain uninsured and/or to meet the special needs of at-risk groups, including those with low incomes, the uninsured, and minorities (Stremikis et al., 2011). No one surveyed believed that the safety net would no longer be needed.

Coverage and Care Post-ACA. The ACA seeks to increase health insurance coverage through increased Medicaid eligibility (currently being implemented on a state-by-state basis) and by subsidies for purchasing private health insurance through new marketplaces. The Congressional Budget Office estimates that the ACA will expand health insurance coverage by 26 million people by 2024; however, Georgia's coverage rate continues to lag behind. Of Georgia residents, 22% were uninsured in 2014, the second highest uninsured population in the United States, compared to 14% nationally (Kaiser Family Foundation, 2015b). From 2013 to 2014, states that expanded Medicaid under the ACA reduced the rates of uninsured three times more than states that did not expand Medicaid (Gallup, 2014). In Georgia, over this time period, the uninsured rate fell by 1%,

compared to a national decline of nearly 4%. It is estimated that 511,826 individuals gained insurance in Georgia through the federally facilitated marketplace during the 2016 open enrollment period (as of 12/26/15) (U.S. Department of Health and Human Services, 2016).

Although increasing rates of insurance under the ACA can financially improve access to care at the individual level, these coverage changes pose a financial risk for some rural safety net providers. With the slow growth in insured rates in Georgia, there will still be a sizable uninsured and vulnerable population that will require safety net care, to the financial detriment of rural hospitals. Compared to rural hospitals in states that expanded Medicaid under the ACA, those in non-expansion states provided greater amounts of uncompensated care as a percentage of revenues in 2013 and appear to be more vulnerable financially (Reiter, Noles, & Pink, 2015). Even among the newly insured, which many assume are a financial benefit to providers, the rapid growth of high-deductible health plans, particularly among low- and moderate-income individuals, could lead to high rates of uncompensated care and bad debt that would be financially detrimental to safety net providers.

An issue that may continue as a limiting factor for insurance coverage in Georgia, especially in rural areas, is the decision not to expand Medicaid coverage. Approximately two-thirds of the 7.3 million rural uninsured live in states that did not expand Medicaid (Newkirk & Damico, 2014). The persistence of uninsured in Georgia, especially in rural areas, has implications for how individuals access care financially. This increases the likelihood of being in the “coverage gap” of not qualifying for Medicaid or subsidies in the Marketplace, which in Georgia amounts to an estimated 409,000 individuals (Kaiser Family Foundation, 2014).

Based on the experience of Massachusetts with state health reform, it is possible that some safety net providers, such as community health centers (CHCs), may see an even greater concentration of uninsured clients after 2014, further straining existing capacity (Ku et al., 2011). A 2009 study found that rural counties without a CHC had a 33% higher rate of uninsured emergency department visits relative to counties with a CHC, underscoring the importance of the safety net in delivering primary care services (Rust, Baltrus, & Ye, 2009).

More so than in many urban areas, the rural safety net may often be the sole provider for both insured and uninsured individuals. As an indispensable component of the care system, it is necessary for stakeholders in the rural safety net to examine opportunities for innovation to ensure their long-term sustainability in the evolving health care environment. The ability of rural safety net providers to remain financially viable is imperative to expanding rural access to care.

DISCUSSION

The health system increasingly values efforts that prioritize improved clinical quality and patient experience, with lower

cost of care. The rural health safety net must adapt accordingly and improve integration of services and coordination of care, which will, in turn, expand access to care. Safety net providers bring experience and expertise in providing comprehensive, culturally competent care to high-need, high-cost populations, often through established partnerships. In ensuring the sustainability of the rural safety net, it is necessary for providers to focus on integration and innovation in delivery of care, particularly when serving the poorer, older, and sicker patients commonly seen in rural areas.

Integration of Community-Based Services. With limited resources and limited numbers of providers, particularly in rural areas, safety net providers have become adept at developing strong community collaborations and partnerships that extend traditional primary care to include behavioral health, substance abuse treatment, and social services (e.g., housing assistance and nutrition programs) to meet the complex needs of the underserved. Health system transformation, reinforced by the ACA, has concentrated on linking services, such as dental, mental, and behavioral health services with primary care and preventive services. In the rural context, where transportation and workforce issues are persistent, linking services can address the challenges to accessing care.

For instance, Missouri completed a three-year pilot program to integrate the primary care services provided by FQHCs and behavioral health services provided by community mental health centers (Schuffman, Druss, & Parks, 2009). Oral health integration pilots in New Mexico and the Carolinas showed that integration was facilitated by involving the community in planning and implementation, building upon the existing health care safety net to link dental services with primary care, and changing public or institutional policy to support the financing and delivery of dental care (Formicola et al., 2004). At the national level, the DentaQuest Foundation is partnering with NACHC and supporting their work to build capacity to promote oral health on behalf of safety net providers across the country.

The concept of increased integration is also at the foundation of safety net institutions positioning themselves as patient-centered medical homes (PCMHs). Many FQHCs, RHCs, public hospitals, and other safety net providers are already integrating components of PCMHs into their care delivery systems. Programs such as the Safety Net Medical Home Initiative, launched in 2008, help safety net clinics improve quality, efficiency, and patient experience. The initiative uses a combination of coaching, assessment and change management tools, and peer-sharing communities to facilitate overhauls of existing workflows, establish team responsibilities, and improve patient/provider dynamics. In Colorado, Idaho, Massachusetts, Oregon, and Pennsylvania, 65 safety net centers were part of the demonstration PCMH pilot, potentially qualifying them for enhanced payments (Sugarman, Phillips, & Wagner, 2014).

Safety Net Provider Collaboration and Integration with the Broader Health Care System. There are ways for the safety

net to engage, formally and proactively, with other parts of the health care system to enhance access. Reflecting the safety net's experience and expertise in providing coordinated care, a recent study found that 28% of accountable care organizations include an FQHC and/or CHC (Lewis et al., 2014). This indicates that safety net primary care providers are participating in the redevelopment of the health care landscape. This trend is also evident in rural health systems, as witnessed by the formation of the National Rural Accountable Care Consortium, which aids communities in the transition to value-based care delivery.

Additionally, there are initiatives focused on workforce development to support integration of rural health care services and expand access to care by increasing the number of providers available. To improve the recruitment and retention of health workers in rural areas, a multifaceted intervention may be needed. This would include education (changing curriculum and onsite training to incorporate rural health); regulation (targeted admission policies and enhanced scopes of practice in rural areas); and financial incentives (personal and professional supports, such as education subsidies, outreach support, and career development programs) (Buchan et al., 2013).

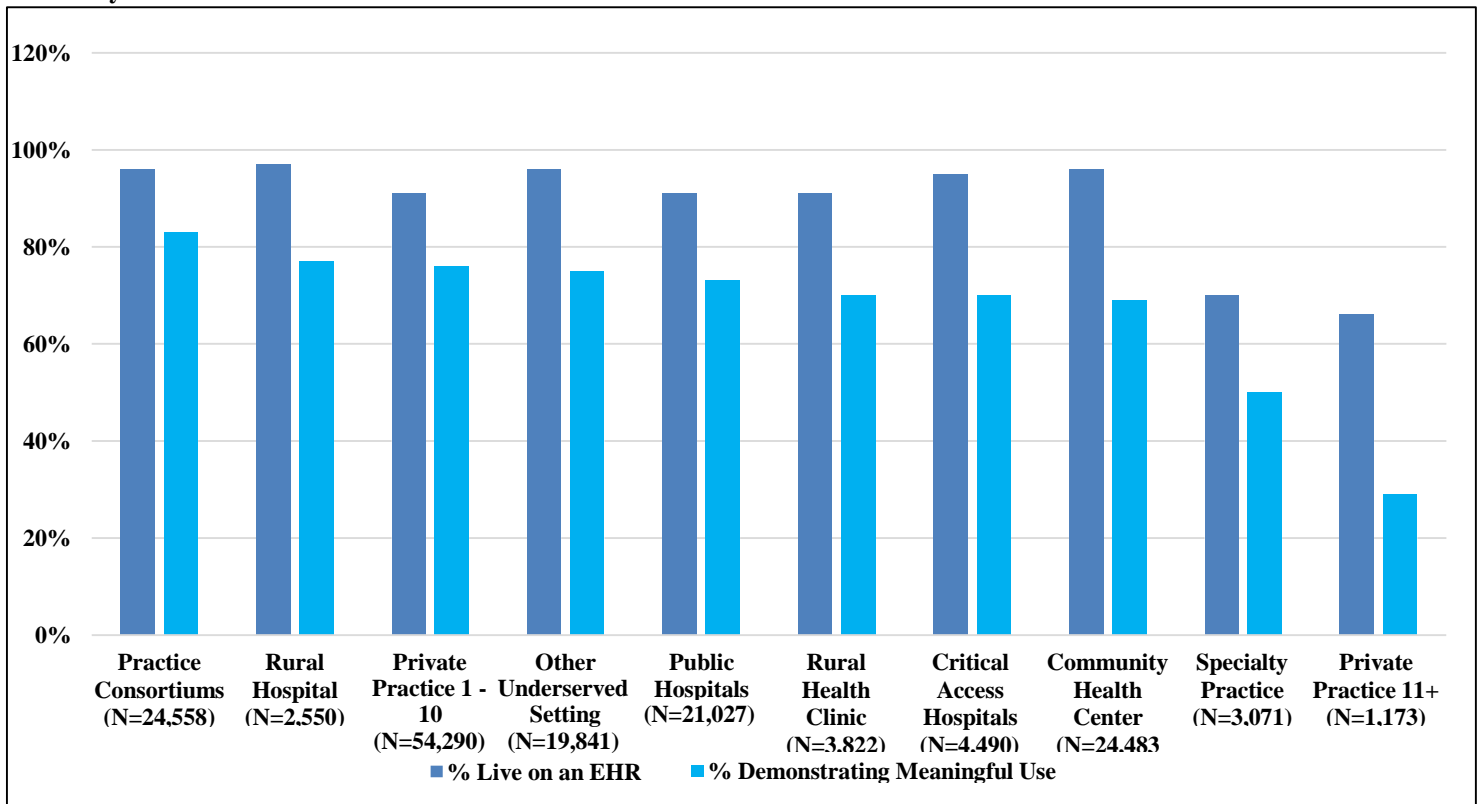
Consistent with its role in reaching clients newly eligible for insurance coverage, the safety net brings additional potential benefits to the health care system as a whole. Many of those newly eligible for insurance under the ACA come from traditionally underserved and uninsured populations and are currently receiving their care through safety net providers. This presents an opportunity for the safety net to play a leading role in helping these populations understand,

navigate, and enroll in coverage (Hess, Grossmann, & Witgert, 2012) and improve the financial ability for individuals to access care.

Information Technology. A central component of improving coordination of care is data exchange. Greater integration of patient-level health information technology (IT) can improve the ability of rural physicians, safety net providers, health centers, and small hospitals to expand access to care for patients by linking their health history with doctors, clinics, and facilities. The ACA provides funding to health care institutions to help them improve IT infrastructure. Additionally, ACA provisions to implement telehealth networks to serve patients in rural and remote areas or home health care also expand access to care in areas with geographic and workforce challenges.

More safety net providers, including those in rural areas, are now using technology to support their work. In 2010, the Office of the National Coordinator for Health Information Technology 2016b (ONC) was established. This includes Regional Extension Centers (RECs), which provide electronic health record (EHR) technical assistance to primary care health providers, particularly in individual and small practices and in practices that increase access to health care for medically underserved communities and un- or underinsured individuals. According to the ONC, as of January 2016, 88% of Georgia's REC-enrolled CAHs and rural hospitals are demonstrating meaningful use of certified EHR technology, compared to 75% of all providers nationally (ONC, 2016a). Figure 4 shows national REC provider rates of EHR adoption by practice setting.

Figure 4. Percent of REC enrolled U.S. providers by Practice Type Live on an EHR and Demonstrating Meaningful Use, January 2016



Source: ONC, 2016b.

According to the Georgia Department of Public Health, most health departments in the state are now telehealth enabled. There could be a role for health departments in promoting the use of telehealth services throughout districts to facilitate greater access to care in underserved rural areas. Health departments can seek grants to support telehealth, create independent entities with appropriate local telehealth expertise, tailor telehealth innovations to emerging needs, and facilitate participation and collaboration within the rural health provider network and with local partners.

CONCLUSIONS

Access to care in rural areas is hindered by geographic isolation, by individual financial barriers (poverty and lack of insurance coverage), and by lack of an adequate number of rural providers. These barriers to accessing care are compounded by the fact that rural safety nets serve an older and sicker population. Yet, provisions of the ACA that expand insurance coverage, focus on population health and wellness, center on improved quality of care, and expand use of IT, offer opportunities to improve access to care in rural areas.

To capitalize on these opportunities, rural safety net providers should engage in strategies that integrate community-based services, collaborate with other health care system partners, and utilize IT to improve care coordination and expand the rural health workforce, and

thereby to improve rural access to care. In summary, the recommendations include:

- Performing a comprehensive assessment of all of the components of the rural safety net and developing evaluation methods to ensure that timely data collection and analysis occur.
- Developing a framework for integration of services and providers in a way ensuring that vulnerable populations in rural communities are included, as are high-performing health departments, CHCs, and other community-based organizations as facilitators of change.
- Funding the implementation of local and regionalized safety net efforts to provide patient-centered homes for the rural un- and under-insured.
- Placing emphasis on approaches that utilize technology in the provision of care (telehealth/telemedicine) and information exchange (electronic medical records).
- Rewarding innovations in safety net workforce development and rural deployment.
- Engaging academic, legislative, and community support to pilot approaches that increase the availability of providers to the rural uninsured and vulnerable population.

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