







Advancing Health in America

















Challenges Facing Rural Communities and the Roadmap to Ensure Local Access to High-quality, Affordable Care

















Challenges Facing Rural Communities and the Roadmap to Ensure Local Access to High-quality, Affordable Care

Nearly 20 percent of Americans live in rural areas and depend on their hospitals as important – and often only – sources of care in their communities. ^{1,2} Rural hospitals provide access to care close to home and improve the health and well-being of the patients and communities they serve. The availability of local, timely access to care saves lives and reduces the added expense, lost work hours and inconvenience of traveling to facilities farther away.

These more vulnerable populations are at increased risk of losing access to some types of health care, exacerbation of health disparities and loss of hospital and other types of local employment.

 George H. Pink, Ph.D., Research Fellow, Sheps Center for Health Services Research, University of North Carolina (UNC), as quoted in Health Resources & Services Administration eNews, "Hospital closings likely to increase" (October 2017) Rural hospitals also serve as economic anchors in their communities; they provide both direct employment opportunities³ and indirect reinforcement of the local economy through the purchase of goods and services from other private sector entities.⁴ The availability of local access to health care is an important factor for businesses considering whether to invest or locate in a particular area. Moreover, private sector employment generated by rural hospitals supports a healthy tax base, which funds services such as public education, fire, police and road maintenance.

Although rural hospitals endeavor to meet the health care needs in their communities, many struggle to address the persistent challenges of providing health care in rural America, such as low patient volumes and geographic isolation. At the same time, they are working to manage more recent and emergent challenges, including economic fluctuations, increased regulatory burden, and the opioid epidemic. In response to these difficulties, some hospitals have elected to merge with larger health systems, engage in other types of affiliations or partnerships, or modify their service offerings, in order to stay viable

and protect health care access for their communities. In fact, there have been 380 rural hospital mergers between 2005 and 2016, with some rural hospitals merging more than once.⁵

While some hospitals are continuing to thrive, others find that the cumulative burden of persistent, recent and emerging challenges threaten their ability to maintain access to services. In fact, the North Carolina Rural Health Research Program reports that as of December 2018, 95 rural hospitals have closed since 2010 (Figure 1). Moreover, the Government Accountability Office reports that more than twice the number of hospitals have closed between



Source: NC Rural Health Research Program. (2018). 95 Rural Hospital Closures: January 2010 — Present. The Cecil G. Sheps Center for Health Services Research, University of North Carolina; www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/

2013 and 2017 than in the previous five-year period, indicating a worsening trend. These closures stem from numerous factors, including failure to recover from the recession, population demographic trends, ongoing financial struggles and decreased demand for inpatient services. The effects of these closures vary: in some cases, hospital closures resulted in a noticeable reduction in a particular set of services (e.g., elimination of obstetric services or conversion of a full-service acute care hospital to an urgent care center), while others led to a complete elimination of local access to care. But, in all cases, local residents are put in a position of having to seek alternatives – sometimes long distances away – to obtain the care they need.

Many rural hospitals, especially those with very limited resources, become overburdened as challenges intensify, accumulate, and compound each other. Moreover, the issues

Losing an employer of 150 people with good jobs is like losing a manufacturing plant. Hospitals are usually the largest, or the second-largest, employer in a community. That's something that's easy to lose sight of because we think of this from a health standpoint. But the effects are wide-ranging when a hospital closes.

 Mark Holmes, Director, Sheps Center for Health Services Research, UNC, as quoted in PBS.org article, "Rural hospitals rely on Medicaid to stay open, study shows" (Jan. 9, 2018)

accumulate, and compound each other. Moreover, the issues of today may hinder rural providers' preparedness for the challenges of tomorrow.

In this report, we examine the persistent, recent, and emergent challenges facing rural hospitals and communities; and recommend updates to existing federal policies and areas for new federal investment to support rural hospitals and communities to ensure access to high-quality, affordable, and efficient health care. To be sure, the policy environment for rural providers is not limited to federal activities; laws and regulations at the state and local levels play critical roles in shaping the rural health care context. However, this report focuses on federal policies and investments in light of their nationwide impact and reach. A complete listing of AHA policy priorities and recommendations for America's rural hospitals and communities is available in the 2018 Rural Advocacy Agenda, 2018 Advocacy Agenda, and the Task Force on Ensuring Access in Vulnerable Communities Report. All are available at www.aha.org.

Persistent, Recent and Emergent Challenges Facing Rural Communities

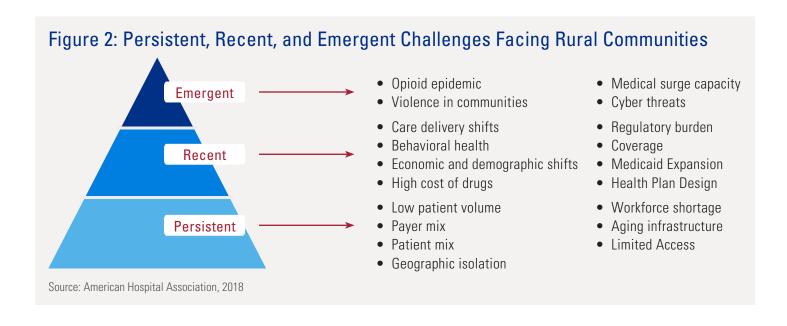
Rural hospitals have always faced a unique set of circumstances, including a challenging payer and patient mix and geographic isolation. In the 1990s and early 2000s, Congress sought to help account for these circumstances and address the growing number of rural hospital closures by creating several special designations and payment programs – the low-volume adjustment, Medicare-dependent hospital program, and ambulance add-on adjustment, among others – which provide enhanced reimbursement under the Medicare program. The designations and programs that remain today are identified and defined in the Appendix. While these programs remain critical to the financial viability of many rural hospitals, they no longer provide the financial predictability they once did, and rural hospitals continue to grapple with an increasing set of new and ongoing challenges.

Persistent Challenges

Low Patient Volume. Due to low population density in rural areas, hospitals lack scale to cover the high fixed operating costs. In fact, as early as 1990, the Government Accountability Office found that

low occupancy was associated with higher risk of hospital closure. Given the clear link between volume and hospital viability, Congress established the Low-volume Hospital Adjustment (LVA) program in 2003. However, the program continues to face threats of retrenchment despite the effectiveness of LVA in assisting hundreds of rural hospitals (excluding Critical Access Hospitals [CAHs], which are not eligible).

Low patient volume, in addition to other rural provider challenges, also can be a hindrance to participating in performance measurement and improvement activities. Rural providers may not be able to obtain statistically reliable results for some performance measures without meeting certain case thresholds, making it difficult to identify areas of success or areas for improvement. Additionally, quality programs often require reporting on measures that are not relevant to the low-volume, rural context. Given these issues, the Centers for Medicare Medicaid Services (CMS) tasked the National Quality Forum to identify a core set of rural-relevant measures and develop rural-focused recommendations on measuring and improving access to care. The final report may be found at www.qualityforum.org.



Challenging Payer Mix. Rural hospitals are more likely to serve a population that relies on Medicare and Medicaid. However, these programs reimburse less than the cost of providing care, making rural hospitals especially vulnerable to policy changes in payment of services. Specifically, in 2017 Medicare and Medicaid made up 56 percent of rural hospitals' net revenue. Yet, overall hospitals receive payment of only 87 cents for every dollar spent caring for Medicare and Medicaid patients. Notably, the Medicare Payment Advisory Commission (MedPAC), found in its March 2018 report to Congress that rural hospitals (excluding CAHs) Medicare margin was -7.4 percent.

Dependence on government programs also makes rural hospitals vulnerable to reductions and shifts in government funds, such as the Affordable Care Act (ACA)-mandated productivity cut, which is a 0.8 percent reduction for inpatient payments in fiscal year 2019. Additionally, Medicare sequestration has reduced payments to all hospitals by 2 percent, including CAHs, which see a reduction in payment from 101 percent to 99 percent of allowable costs. Meanwhile, hospitals in states that did not expand Medicaid under the ACA have higher rates of unrecoverable debt and charity care, as well as higher rates of uninsured patients.¹²

Challenging Patient Mix. Rural hospitals treat a patient population that is often older, sicker and poorer compared to national averages. For example, although less than 14 percent of the nation's population is over age 65, this group makes up more than 18 percent of residents in rural areas.¹³ In 2016, the Robert Wood Johnson Foundation

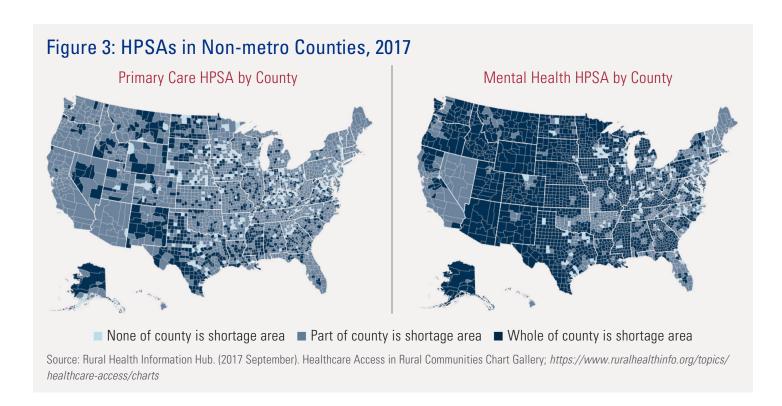
Rural America is a little bit older, a little bit sicker, a little bit poorer.

 Anand Parekh M.D., Chief Medical Advisor, Bipartisan Policy Center, as quoted in the Advisory Board Daily Briefing (March 3, 2018)

published its County Health Rankings Key Findings Report, which showed that across health behaviors, clinical care, and social and economic factors, rural counties performed worse in nearly all categories: adult smoking, adult obesity, teen births, uninsured rates, preventable hospitals stays, education, children living in poverty, and injury deaths. These characteristics underscore the importance of local access to care and the need for resources to support the changing needs of the community.

Geographic Isolation. Rural communities are often located away from population centers and other health care facilities. According to a recent Pew Research Center survey, among the quarter of rural Americans traveling the longest to reach an acute care facility, the average travel time is 34 minutes by car. ¹⁴ Beyond this, in some rural communities, inclement weather or hazardous terrain can make transportation impossible or unsafe. And for many, public transportation is not reliable or available at all. Geographic challenges such as these can cause patients to delay or forego health care services, ¹⁵ which can increase the complexity and overall cost of care once services are delivered. ¹⁶ Isolation also may be a barrier to professional development and continuing clinical education.

Workforce Shortages. Recruitment and retention of health care professionals is an ongoing challenge and expense for rural hospitals. While almost 20 percent of the U.S. population lives in rural areas, less than 10 percent of U.S. physicians practice in these communities.¹⁷ Figure 3 shows how widespread Health Professional Shortage Areas (HPSAs) are across rural America.



Primary care is experiencing widespread professional shortages in rural areas. As of November 2018, two-thirds of the nation's 6,941 primary care Health Professional Shortage Areas (HPSAs) were in rural or partially rural areas.¹⁸

Nurse practitioners, midwives and physician assistants have helped to address the shortages. In fact, nurse practitioners and physician assistants currently account for 19 percent and 7 percent, respectively, of the primary care workforce There is no community (public) mental health care, and often there are no relevant hospital services within a reasonable distance. So, people are just left on their own.

 www.CNN.com, "There's a severe shortage of mental health professionals in rural areas. Here's why that's a serious problem" (June 22, 2018)

and contribute substantially to the total supply of primary care visits. However, many state licensure laws limit the ability of advanced practice clinicians to practice at the top of their license, thus limiting the services they may offer to patients. Physician supervision regulations also may hinder maximal use of advanced professional staff.

Clinical workforce shortages exist across specialties, but the limited number of behavioral health providers is particularly striking.²⁰ In fact, a 2016 JAMA study found that mental health conditions were responsible for nearly 80 percent of telemedicine visits among rural Medicare beneficiaries from 2004-2013, highlighting both the scarcity of behavioral health specialists and a need for innovative solutions.²¹

In addition, non-clinical staff to support rural health care activities also are in short supply. A 2018 Medical Group Management Association Stat poll found that more than 60 percent of respondents indicated

						ES	sential H	ealth Car	e Servi
	O O								
	Primary Care	Psychiatric and substance use treatment services	ED and observation care	Prenatal care	Transportation	Diagnostic services	Home care	Dentistry services	Robus referra structu
Addressing the Social Determinants of Health					х				Х
Global Budget Payments	X	x	x	х	x	x	x		X
Inpatient/Outpatient Transformation Strategy	х	х	x	х		x			Х
Emergency Medical Center	x		x		х	x			Х
Urgent Care Center	X					х			X
Virtual Care Strategies	X	х	X						х
Frontier Health System	X	х	х	х	х	х	X		х
Rural Hospital-Health Clinic Strategy	х	х	х	х		х		x	Х
Indian Health Services Strategies	х	х	х	х	х	х	х		х

that their organization had a shortage of qualified applicants for non-clinical positions in the past year.²² Difficulty in recruiting to rural areas was noted as one of the reasons for the hiring deficit.²³

Limited Access to Essential Services. Workforce shortages, geographic isolation and other persistent challenges facing rural communities contribute to low availability of services, including primary care, behavioral health services and dental care. For example, while the average rate of primary care physicians (PCPs) across the United States is approximately 80 PCPs per 100,000 people, rural areas experience a rate of only 68 PCPs per 100,000 people. Insufficient access to primary care and other essential services leads to poorer health outcomes and increases the likelihood of more costly, higher acuity episodes at the time of treatment. Moreover, limited transportation options in rural areas exacerbate access challenges, contributing to delayed (or forgone) medical attention and subsequent disease progression. ²⁵

In recognition of the challenges facing vulnerable communities and the need for new strategies to address them, in 2015 the AHA Board of Trustees created the Task Force on Ensuring Access in Vulnerable Communities. The Task Force identified a set of essential services, illustrated in Figure 4, that should be available in all communities. These services, along with strategies to help to rural communities maintain access to them, are described in the Task Force's report, which is available at www.aha.org/ensuringaccess.

Aging Infrastructure and Access to Capital. Many rural hospitals were constructed following the passage of the Hill-Burton Act of 1947, which provided grants and loans for the construction and modernization of hospitals and other health care facilities. Currently, many rural hospitals need to update their facilities and services to better align with how care is delivered in the 21st century. Yet, narrow financial margins limit rural hospitals' ability to retain earnings and secure access to capital or qualify for U.S. Department of Agriculture or the U.S. Department of Housing and Urban Development mortgage guarantees. Without some or all of these resources, rural hospitals are unable to update facilities and purchase needed equipment. Moreover, the Tax Cuts and Jobs Act of 2017 included changes that could affect interest rates for tax-exempt bonds, making borrowing more expensive for hospitals.²⁶

Recent Challenges

Changes in health care delivery, the high cost of prescription drugs and other challenges have emerged recently, requiring flexibility, additional resources and new strategies for hospitals to meet the needs of their communities.

Changes in Health Care Delivery. Across the United States, numerous health care services that have previously only been provided on an inpatient basis are now offered in outpatient settings. This shift reflects advancements in clinical practices, sophisticated technologies, innovations and changes in patient preferences. Between 2006 and 2016, outpatient visits have risen by nearly 50 percent among Medicare beneficiaries across the country, while inpatient discharges have dropped by more than 20 percent. On the whole, rural hospitals are experiencing this broader trend: during the past three years, total inpatient admissions in rural hospitals have decreased by 4 percent while outpatient visits have increased by 9 percent. And, in 2016, outpatient services represented nearly two-thirds of rural hospitals' total gross revenue.

However, the movement from inpatient care toward more outpatient services can be problematic for some hospitals, especially those with low patient volumes. Most Medicare designations and special payment programs for rural hospitals are tied to inpatient services (see Appendix for descriptions), reflecting the health care system's longstanding emphasis on acute, inpatient care. Yet, in light of low patient volume overall and the rise of outpatient care, these programs may not be sufficient to bolster the financial stability of these providers. To be sure, inpatient payment programs are necessary to support rural health care, but policymakers must also consider ways to maintain viability of outpatient care and other types of services, given the overall shift of many services out of the inpatient setting.

Coverage. Affordable health coverage is one of the most pressing financial challenges facing health care stakeholders, including consumers, providers, employers, and state and federal governments. Recent changes in coverage availability, eligibility criteria, and health plan design may reduce short-term costs for some areas of the health care system while at the same time cause negative – and often broader – unintended consequences in other areas. Individuals without adequate health insurance and those with plans that have high out-of-pocket expenses often cannot pay for emergency and other acute health services, leaving providers with higher rates of uncompensated care.

Medicaid Expansion. States that chose not to expand Medicaid coverage under the ACA, citing future costs to state budgets, have higher numbers of uninsured individuals.³⁰ Moreover, approximately 80 percent of rural hospital closures since 2014 have occurred in non-expansion states.³¹ Although the percentage of insured individuals is not the sole factor in closures occurring across the U.S., researchers have found an association between Medicaid expansion and improved hospital financial performance, especially in rural areas.³²

The effect, in terms of the closure rates between [Medicaid] expansion and non-expansion states, seems to be especially strong for rural hospitals.

 Gregory Tung, Ph.D., Assistant Professor, Colorado School of Public Health, University of Colorado, as quoted in Healthline. com newsletter (Jan. 16, 2018)

Health Plan Design. Among the approaches employers and private health plans are taking to manage costs is to offer limited coverage plans, such as high-deductible health plans (HDHPs), so-called "skinny" plans, which cover fewer services, and short-term insurance plans. These types of health plans have grown significantly in recent years: nearly half of all non-elderly adults with private insurance are enrolled in a HDHP, and 39 percent of large employers only offer HDHPs.³³ While these plans are less expensive options for some payers, they often leave consumers with large, unexpected, costs for care, which are then shifted to hospitals in the form of uncompensated care. Evidence suggests that the uptake of HDHPs is greater in rural areas, leading to provider concerns about uncompensated care costs and inadequate patient access to services in these communities.³⁴

Behavioral Health Trends. Although behavioral health concerns – including mental illness, emotional distresses and substance use disorders – have long affected the American population nationwide, recent evidence suggests that some of these conditions disproportionately affect rural communities.³⁵ For example, a 2017 study found that suicide rates have been consistently higher in rural areas for nearly two decades.³⁶ Additionally, as the entire country continues to confront the opioid crisis, rates of drug

overdose deaths in rural communities are notably on the rise.³⁷ These trends are especially alarming in light of the fact that more than 60 percent of mental health HPSAs are rural or partially rural (see Figure 3).³⁸ Without sufficient capacity – including financial, staffing and organizational resources – to provide access to crucial services, rural hospitals will not be adequately equipped to address the unique behavioral needs of their communities.

Economic, Population and Social Changes. In recent years, economic, demographic, and social changes have deepened the challenges faced by rural communities. Numerous factors are at work,

including the shift from a manufacturing-intensive economy to a more service-driven, technology-based economy. The Great Recession hit rural communities hard with higher unemployment and lagging economic growth.

For example, access to capital for rural businesses has still not rebounded, and real estate appreciation in rural communities continues to lag behind, affecting the value of home ownership – a primary source of wealth and savings for families ³⁹ And between

the number of taxpayers has dwindled.
Doug Farquhar, National Conference of State Legislatures, as quoted in pewtrusts.org, Rural Counties are Making a Comeback,

Many small towns have had to cut back

combination with neighboring towns as

[public] services or deliver them in

Census Data Shows (March 22, 2018)

source of wealth and savings for families.³⁹ And between 2010 and 2014, a majority of rural counties lost businesses spanning multiple industries, including farming, manufacturing, coal, timber and fishing.⁴⁰

Fortunately, hard work, ingenuity and entrepreneurial energy can be found in every community in the country.

Policymakers should focus on empowering those forces to rekindle the grassroots economic growth that made this country the world's leading economy in the first place.

 $-\$ Economic Innovation Group, The 2017 Distressed Communities Index

In addition, from 2010-2016, the population in rural areas declined, due to the combination of migration (including younger workers seeking employment in urban areas) and natural changes (births minus deaths). 41,42 Social challenges as well have changed in recent years. An analysis by the Wall Street Journal found that by several measures of socio-economic well-being, rural counties fare worse than the other three major population groupings: suburbs, and medium or small metropolitan areas. 43

Increased Regulatory Burden. According to "Regulatory Overload: Assessing the Regulatory Burden on Health Systems, Hospitals and Post-acute Care Providers," a 2017 study conducted by the AHA, the nation's hospitals, health systems and post-acute care providers spend \$39 billion each year on non-clinical regulatory requirements. These costs include the staff required to meet the demands of the regulations concerning physicians, nurses, legal, management, health information technology professionals and others. CMS has acknowledged the regulatory burden on providers and continues to review the effectiveness of current regulation through its Patients over Paperwork initiative.

While rural hospitals are subject to the same regulations as other hospitals, lower patient volumes mean that, on a per-discharge basis, their cost of compliance is often higher than for larger facilities. The volume of regulation, pace of change, and complexity of the regulatory framework requires scale to

implement – and rural areas lack scale. For rural hospitals, the opportunity cost – the next best thing that could be done with the financial and human resources spent on regulatory burden – can mean the loss of local access to services.

High Cost of Prescription Drugs. Spending on pharmaceuticals has skyrocketed over the past several years. The burden of this increase falls on all purchasers, including patients and the providers who treat them. Hospitals face significant resource constraints and trade-offs as spending on drugs increases. In 2016, the AHA and the Federation of American Hospitals worked with the NORC at the University of Chicago to document hospital and health system experience with inpatient drug spending. Results showed that, while retail spending on prescription drugs increased by 10.6 percent between 2013 and 2015, hospital spending on drugs in the inpatient space rose 38.7 percent per admission during the same period. 44,45

Emergent Challenges and Threats

In addition to managing ongoing challenges, rural hospitals also must be prepared to respond immediately to events and crises that affect the community, including those that occur unexpectedly. Capacity to address these emergent challenges – such as the opioid epidemic, violence, natural disasters and cyber attacks – represent an essential component of our nation's health and

When we heard there was a shooter inside the school, we braced for the worst. But we were prepared. We had practiced. The staff knew what their roles were and we followed our playbook.

 David L. Schreiner, President & CEO, Katherine Shaw Bethea Hospital, Dixon, III.

public safety infrastructure. However, this role is not explicitly funded, making it even more challenging for rural hospitals to spread scarce resources to meet the increasing challenges and needs in their communities.

Opioid Epidemic. In 2017, more than 42,000 deaths were attributed to opioid overdoses. ⁴⁶ And in 2017, the Department of Health and Human Services declared the opioid epidemic a public health emergency. Also in 2017, the Centers for Disease Control and Prevention announced that the rates of deaths from drug overdoses in rural areas were rising to surpass rates in urban areas. ^{47,48} According to a recent National Public Radio poll, one quarter of rural Americans say opioid and other drug abuse is the biggest issue that faces their communities. ⁴⁹

While no corner of the country has gone untouched by this issue, the opioid epidemic has hit rural America particularly hard.

 U.S. Department of Agriculture. Opioid Misuse in Rural America, (2018) Congress recently passed comprehensive bipartisan legislation in response to the opioid epidemic. The Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act of 2018 comprises dozens of individual bills that direct additional federal resources toward prevention, education, coverage, treatment, workforce and law enforcement.

Hospitals have a key role in responding to the nation's opioid epidemic: from treating overdoses in the emergency department to caring for babies with neonatal abstinence syndrome to connecting patients with treatment and recovery resources.

Violence in Communities. Incidences of violence, such as mass shootings, are events that communities hope never occur; yet hospitals must be prepared to respond. Shootings in workplaces, schools and public spaces have not been limited to any one geographic area; rather, they have occurred all across America. To prepare for incidences of mass violence, many hospitals conduct preparedness drills with local law enforcement. Conducting these drills requires hospitals to temporarily shut down non-emergency services and redirect staff to participate in preparedness activities. Federal and state agencies often provide resources to help hospitals purchase equipment to prepare for emergencies; however, the cost for lost services and staff time are borne by the hospital. Hospitals also are dealing with a wave of violence within their walls, sometimes directed at employees. To keep patients and employees safe, rural hospitals are increasingly establishing partnerships with local law enforcement or hiring security, creating another necessary, but indirect cost to operating a hospital.

Human trafficking is another example of violence that is increasing in rural communities. ^{51,52} Victims of human trafficking will likely seek medical attention for emergency or preventive care at some point. ⁵³ Health care professionals are on the front lines of this challenge, helping to identify and appropriately treat victims, both of which require special training. ⁵⁴

If a medical professional is able to identify a potential trafficking situation, he or she can connect that victim to the appropriate services that may save that victim's life.

 Polaris Project blog post, "Healthcare Professionals on the Frontline of Helping Trafficking Victims" (April 14, 2016)

Medical Surge Capacity. The ability to care for a significantly increased volume of patients when a tragic event strikes – referred to as "medical surge capacity" – is a key marker of an effective health care system. ⁵⁵ For America's hospitals, such readiness is an imperative; they are always there, prepared to care in times of need. While hospitals have always had disaster plans in place, more recent incidences of hurricanes, wildfires, flooding, and threats of viruses like Ebola and Zika have raised the bar for emergency preparedness. Although rural areas are not immune to natural disasters, terrorist attacks and epidemics, these communities may not be adequately prepared for large-scale events if they lack sufficient medical staff and resources to respond to such emergencies. While federal resources, such as those authorized through the Pandemic and All-Hazard Preparedness Act, provide some support to help hospitals and communities prepare for and respond to disasters and public health emergencies, they have not kept pace with the ever-changing and growing responsibilities hospitals have in times of crisis.

Cyber Threats. Hospitals, and health care overall, remain heavily targeted by cyber adversaries. The health care field is increasingly realizing the promise of networked information technologies to improve quality and patient safety and bring efficiencies to our systems. However, with those opportunities come vulnerabilities to theft and threats to the security of personal health and payment information for patients and employees, billing records, and even the function of medical devices. Increasingly, bad actors are using phishing emails, malware, vendor access and other tactics to attempt to attack hospital computers, networks and connected devices.

Protecting information and appropriately responding to threats creates significant indirect cost for hospitals and can require individuals with specialized skills. These costs are not reimbursed by payers and can be especially difficult for rural hospitals with limited financial and human resources. This is made more challenging by the significant shortages of cybersecurity professionals across the nation.

Roadmap for Action: Updating Federal Policies and Investing in Rural Communities

In light of the persistent, recent and emergent challenges of providing care in rural areas, as well as the ongoing transformation of the health care system, federal policies need to be updated for the 21st century. New investments of resources that protect access to care also are needed to provide the tools to ensure local access to high-quality, affordable, efficient health care. Policy recommendations are identified in this section.

New Models of Care

The health care system is changing at a rapid pace, and new models of care offer alternative ways of delivering and paying for care. One important example of a new model of care is the establishment of an emergency medical center designation under the Medicare program for rural hospitals. Such a designation would allow existing facilities to meet a community's need for emergency and

A New Medicare Designation for Rural Providers

- » Eligible rural hospitals that discontinue inpatient care could convert to the new designation
- Services include 24/7 emergency and observation services, ambulance and transportation to acute facilities as needed
- » Facilities may also provide skilled nursing (separate licensed unit) and outpatient services

outpatient services without having to provide inpatient services. In addition to having emergency services provided 24 hours a day, 365 days a year, communities would have the flexibility to align additional outpatient and post-acute services with local needs, and receive enhanced reimbursement.

This type of designation has been supported in bipartisan, bicameral legislation in the 115th Congress, including the Rural Emergency Acute Care Hospital (REACH) Act (S.1130) and the Rural Emergency Medical Center Act (H.R. 5678). MedPAC also recommended the establishment of such a model in its June 2018 Report to Congress.

CMS' Center for Medicare & Medicaid Innovation (CMMI) also continues to test several new models for rural providers, including:

- The *Rural Community Hospital Demonstration*, which tests the feasibility of cost-based Medicare reimbursement for inpatient services for 30 smaller rural hospitals with 25-50 beds;
- The Frontier Community Health Integration Project (FCHIP) Demonstration, which tests several care delivery innovations across 10 hospitals, including cost-based reimbursement for telehealth services and certain CAH-owned ambulance services, and;
- The *Pennsylvania Rural Health Model*, which will test an all-payer global budget payment structure along with care delivery redesign for certain rural hospitals in the state.

While these demonstrations are promising, additional opportunities are needed to expand successful models and make them permanent, continue assessments of model performance, and develop new models that are flexible and meaningful for rural communities.

As rural hospitals employ new models of care and embark on pathways to transformation, such as value-based care and population health strategies, they need flexibility and resources to be successful.

Congress and CMS should expand opportunities for rural communities to choose new models of care (e.g., establishment of an emergency medical center designation, development of new demonstrations), while ensuring flexibility in payment and delivery design.

Reimbursement

Rural hospitals are committed to caring for their communities and improving value; however, without financial predictability, including an adequate margin for capitalization, they cannot maintain local access to essential services. For many rural hospitals, the "no margin, no mission" adage rings terribly true.

Given the persistent, recent and emergent challenges faced by rural hospitals, it is increasingly difficult to cover the high fixed costs of operating a hospital and maintain access to services while also pursuing new pathways to improve quality and value. Unfortunately, in recent years, policymakers have repeatedly cut payments to hospitals. For example, while seeking reductions to the federal budget in 2011, Congress passed Medicare sequestration, which bluntly cut all payments to hospitals and CAHs by 2 percent; these cuts have been extended several times.

Another example of recent hospital payment cuts are so-called "site-neutral" policies, which seek to reduce reimbursement for non-emergency services delivered in hospitals' off-campus provider-based departments (PBDs), including those serving rural communities. The intention of these policies is to make total payment for a service provided in a hospital the same as when a service is provided in a physician office or ambulatory surgery center. However, patient needs, cost structures and regulatory requirements vastly differ across these settings. For example, PBDs treat patients who are more likely to be Medicare or Medicaid beneficiaries, have medically complex conditions, and live in high-poverty areas. In addition, patients are commonly referred to PBDs by physicians for safety reasons, as hospitals are better equipped to handle complications and emergencies. Overall, site-neutral policies fail to recognize the reality in which hospitals operate to serve the needs of their communities.

While PBDs across the country feel the impact of these policies, rural hospitals may be especially affected in light of PBDs being frequently used as important health care access points in more remote areas. In particular, recent proposals also would reduce payments to off-campus PBDs that were previously exempt from cuts given the critical role they play in their communities. Cutting support for these facilities would clearly impede access to care for the most vulnerable patients.

Federal and private payers need to update covered services and increase reimbursements rates to cover the cost of providing care, including by opposing any further site-neutral payment policies.

Easing Regulatory Burden

Hospitals and health systems must comply with 341 mandatory regulatory requirements and an additional 288 requirements for post-acute care. The AHA found that health systems, hospitals and post-acute care providers spend \$39 billion each year – \$7.6 million for an average-sized community hospital – on non-clinical regulatory requirements. While rural hospitals are subject to the same regulations as other

hospitals, lower patient volumes mean that, on a per-patient basis, the cost of compliance is often higher. Policymakers should protect access to health care in rural areas by providing relief from outdated or unnecessary regulations.

Health Information Technology (HIT). Rural hospitals are committed to improved care through use of HIT in order to meet past and current regulatory requirements. The use of electronic health records (EHRs) and other health IT to meet increased requirements for information exchange through programs like the Promoting Interoperability Program (formerly known as the EHR Incentive Programs, or meaningful use) result in significant investment to purchase, upgrade, and maintain equipment and software. Many of these costs are ongoing, including expensive system upgrades required by regulation and the recruitment and retention of trained staff to use and service the technology. Rural hospitals must meet the same regulatory requirements for the Promoting Interoperability Program as other hospitals, yet often do not need the additional technology functionality contained in required, expensive system upgrades; nor do they have the available infrastructure such as adequate broadband to support them. While CMS recently provided needed flexibility in the Promoting Interoperability Program, concerns remain that the requirements and technology costs, particularly related to the 2015 edition certified EHR technology, are beyond the reach of some rural hospitals.

Medicare Conditions of Participation (CoP) and Compliance. Medicare CoPs require providers to adhere to established health quality, safety and operational standards in order to participate in the Medicare program. There is tremendous value in having CoPs to ensure the safe delivery of care; however, the preparatory work, surveys and follow-up documentation required to certify that hospitals adhere to all standards presents a growing burden to providers. CoPs for Medicare are a significant source of the cost of regulatory compliance. Surveyors assessing hospital compliance should be provided with training and guidance related to rural-specific circumstances, including low patient volume and sometimes limited capacity. In addition, future CoPs should be developed with more flexibility, a strong evidence base and alignment with other laws and industry standards.

Direct Supervision. CMS also enforces a policy for CAHs and small (i.e., fewer than 100 beds) rural hospitals, requiring "direct supervision" for all outpatient therapeutic services (with some exceptions). This policy requires that a physician be immediately available for even the lowest risk outpatient therapeutic services, such as the application of a splint to a finger. Without adequate numbers of health professionals in rural communities to provide direct supervision, some hospitals may limit their hours of operation or reduce services due to their inability to meet this requirement. Congress should pass a permanent moratorium on enforcement of CMS's "direct supervision" requirement for outpatient therapeutic services provided in CAHs and certain small, rural hospitals.

96-Hour Rule. Currently, to maintain their designation, CAHs must maintain an annual length of stay (LOS) of 96 hours or less. However, in recent years, CMS enforced a condition of payment for CAHs that requires a physician to certify that a beneficiary may reasonably be expected to be discharged or transferred to another hospital within 96 hours of admission. This additional step and limitation is detrimental to CAHs, and may force them to eliminate "96-hour-plus" services, ultimately affecting access to appropriate care for Medicare beneficiaries in these facilities. **CAHs appreciate recent efforts by CMS to reduce this regulatory burden, however a statutory change is required to remove the physician certification requirement from the 96-hour rule.**

Co-location. Hospitals often create arrangements with other hospitals or providers of care in order to offer a broader range of medical services, improve care coordination, and better meet the needs of patients – including specific patient populations. For example, a rural hospital may lease space once a month to medical specialists from out of town so that people from the community can get needed specialty care. Unfortunately, in recent years, CMS has expressed several conflicting interpretations of these rules that may differ from prior understanding, such as standards about what constitutes separateness, when separate entrances are required, which types of services may be shared, and how an adequate level of public awareness is achieved when one provider leases space to another. **CMS should clarify its rules related to shared space or "co-location" arrangements between hospitals and/or health care professionals.**

Stark Law and Anti-Kickback Statute. The Stark Law and Anti-Kickback Statute are intended to prevent fraud and abuse and govern financial arrangements between physicians and hospitals. However, they need to be updated to reflect how care is delivered today, including value-based and coordinated care. While not intended by the laws, the potential for violating these statutes may be higher for rural hospitals in light of their unique conditions. For example, limited patient volume may necessitate the need to share specialists with non-affiliated hospitals; as a result, ongoing patient referrals to these facilities could implicate the Anti-Kickback Statute. Policymakers should remove barriers to care transformation, such as creating a "safe harbor" under the Anti-Kickback Statute and reforming the Stark Law and certain civil monetary penalties to foster and protect arrangements that promote value-based care.

Telehealth

Telehealth expands access to services which may not otherwise be sustained locally due to provider recruitment/ retention difficulties, low patient volume, or inadequate local resources. It also holds great potential to address health care disparities, which have long existed in rural communities, including those based on geographic isolation, an aged population, and race and ethnicity. As technology has improved and people are increasingly comfortable with the delivery of care

Rural hospitals often play the role of "originating site," meaning that patients still physically go to the hospital to receive a service provided from a health professional located at a distant site. Even in cases where originating sites are eligible to bill Medicare for a telehealth facility fee, the reimbursement rates are marginal compared to the overall costs.

American Hospital Association, 2018

through virtual connections, the utilization of telehealth services has dramatically increased. Indeed, among rural Medicare beneficiaries, the number of telehealth visits increased from 7,015 in 2004 to 107,955 in 2013 and continues to rise. Telehealth also may be especially important for providing care in specialties that are not well represented in rural areas. In a recent analysis of rural Medicare beneficiaries, researchers found that nearly 80 percent of telehealth visits were related to mental health conditions, underscoring both the need and opportunity for this type of care in rural America. **

Medicare has increased its coverage of telehealth services for patients living in rural areas, and in 2018,

Congress further expanded coverage to include telestroke care. However, barriers to widespread use of telehealth remain, including:

- statutory and regulatory restrictions on how Medicare covers and pays for telehealth;
- lack of adequate broadband connectivity in some areas;
- cross-state licensure hurdles for practitioners; and
- high cost of acquiring and maintaining necessary equipment.

The promise of telehealth cannot be realized in rural areas without additional governmental support for these services. Federal payers should expand coverage of services and technologies; provide payment parity with services delivered in-person; assist with the expensive start-up costs of providing access to telehealth services; and cover the cost of providing telehealth at the patient's site of care ("originating site").

The 25-bed [hospital]... loses Internet connections often enough that ambulance drivers are told to divert critical patients, whose CT scans are transmitted to specialists, to a hospital 50 minutes away.

 "Rural America is Stranded in the Dial-Up Age," Wall Street Journal, (June 15, 2017) Broadband. According to the Federal Communications Commission (FCC), 34 million Americans still lack access to adequate broadband. Many of these are located in rural areas. Lack of affordable, adequate broadband infrastructure impedes routine health care operations (such as widespread use of EHRs and imaging tools) and limits their availability. In August 2018, the FCC proposed the creation of a new \$100 million Connect Care Pilot Program to support telehealth for low-income Americans, especially those living in rural areas. If

established, the program would support the expansion of broadband and promote the use of broadbandenabled telehealth services among low-income families and veterans, with a focus on services delivered directly to patients beyond the doors of brick-and-mortar health care facilities.⁶¹ **Federal investment in broadband connectivity should continue to be a priority.**

Prescription Drug Costs

Increased spending on prescription drugs is putting access and quality of care at risk by straining providers' ability to access the drug therapies they need to care for their patients and the ability of patients to pay for the medicines they need. The primary driver behind this growth in drug spending is higher prices, not increased utilization. Within the health care field, "pharmaceuticals" was "the fastest growing category" in terms of pricing for every month of 2016 and for most of 2017. Drug manufacturers have full control over the initial price for a drug and any subsequent price increases. They are responsible for setting the price of a drug at \$89,000, \$159,000, or even \$850,000 for a course of treatment. They also solely decide whether to increase that price by 20 percent, \$150,000 for the patients and the ability of pat

Actions must be taken to address the high price of prescription drugs including: fast-tracking generic medicines to market; preventing drug manufacturers from making small adjustments to older drugs and receiving financial benefits and protections reserved for new drugs; and paying generic manufacturers to delay the release of a cheaper version of the drug.⁶⁸

340B Program. For more than 25 years, the 340B Drug Pricing Program has been critical in expanding access to lifesaving prescription drugs and comprehensive health care services in vulnerable communities that include low-income and uninsured individuals. Congress established the 340B program in response to the pressure high-drug costs were putting on providers and with the stated objective "to stretch scarce Federal resources as far as possible, reaching more eligible patients and providing more comprehensive services."

In 2015, 340B hospitals provided \$23.8 billion in uncompensated care and \$51.7 billion in total benefits to their communities. Hospitals were able to provide these benefits despite significant fiscal pressures. Also in 2015, one out of every four 340B hospitals had a negative operating margin, and one in three 340B CAHs had a negative operating margin. Any focus on limiting the 340B program as part of a plan to lower drug prices is misplaced. Efforts to scale back the program would have devastating consequences for the patients and communities served.

Workforce

Graduate Medical Education (GME). Medicare GME funding is critical to maintain the physician workforce and sustain access to care in rural communities and across the nation. The Balanced Budget Act of 1997 (BBA) imposed caps on the number of residents for which each teaching hospital is eligible to receive GME reimbursement. The BBA also reduced over time the additional payment teaching hospitals receive for Medicare discharges, known as the indirect medical education (IME) adjustment, that reflect the higher patient care costs at these facilities. Congress should lift the cap on the number of Medicare-funded residency slots, which would expand training opportunities in rural settings and help address health professional shortages.

Targeted Programs. Recruitment and retention of health professionals is a persistent challenge for rural providers, resulting in workforce shortages, reduced access to care for patients and high ongoing costs to providers. Some existing programs work to ameliorate workforce deficits by incentivizing clinicians to work in rural areas, such as the Conrad State 30 and the National Health Service Corps programs, which are administered by federal agencies with funding from Congress. In addition, the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act of 2018 establishes a loan repayment program for substance use disorder treatment professionals in mental health professional shortage areas or counties hardest hit by drug overdoses. Despite the promise of these programs, with only one percent of medical residents and fellows indicating a preference for practicing in a small town or rural area, designers of rural recruitment programs will have to consider additional, unique ways to attract the next generation of clinicians.⁷²

In addition, as mentioned above, advancements in telehealth can address workforce challenges by connecting patients and their providers to specialists in other locations; however, state licensure restrictions often limit the reach of telehealth services. In response, 17 states have enacted legislation supporting the Interstate Medical Licensure Compact, which expedites the licensure process for physicians wishing to practice medicine in multiple states.⁷³ **These recruitment and retention programs are important to support a sustainable rural health care workforce; however, additional solutions need to be developed to address workforce shortages and challenges in rural areas.**

Conclusion

Although rural hospitals have long faced unique circumstances that can complicate health improvement efforts, more recent and emergent challenges are exacerbating their financial instability – and by extension, the economic health of their communities. Individually, these are complex, multifaceted challenges. Taken together, they are immense, requiring policymakers, stakeholders and communities to work together, innovate and embrace value-based approaches to improving health in rural communities.

The federal government must play a principal role by updating policies and investing new resources in rural communities. A complete listing of AHA policy priorities and recommendations for America's rural hospitals and communities is available in the 2019 Rural Advocacy Agenda, 2019 Advocacy Agenda and the Task Force on Ensuring Access in Vulnerable Communities Report; all are available at www.aha.org.

Appendix

Figure 5: Medicare Designations for Rural Hospitals

Designation	Eligibility Criteria	Medicare Payment		
Critical Access Hospital (CAH)	 Rural or acquires rural status (42 CFR 412.103 for detail) More than 35 miles from nearest hospital or CAH or more than 15 miles in areas with hazardous terrain or only secondary roads or designated by state as "necessary provider" before 2006 25 beds or fewer (including swing beds) 24-hour emergency services Annual average length of stay of 96 hours or less per patient for acute care 	 101 percent of "reasonable costs" for both inpatient and outpatient care. CAHs are not subject to inpatient prospective payment system (PPS) or outpatient (PPS) and are not "subsection (d)" hospital 101 percent of reasonable costs for swing bed services 		
Sole Community Hospital (SCH)	 More than 35 miles from other "like" hospitals (excludes CAHs) or rural and one of the following: Between 25 and 35 miles from other like hospitals and serves as main hospital in the vicinity (42 CFR 412.92 for detail) Between 15 and 25 miles, but other hospitals often inaccessible (e.g., due to severe weather) Nearest like hospital is at least 45 minutes away 	 Inpatient: Higher of standard inpatient PPS or hospital-specific rate (HSR) HSR derived from cost per discharge in a base year (1982, 1987, 1996, 2006), adjusted for inflation and case mix Outpatient: Outpatient PPS + 7.1 percent (except drugs and biologics) 		
Medicare Dependent Hospital (MDH)	 Rural or acquires rural status (42 CFR 412.103 for detail). Expired in 2017 but extended through 2022 Not a SCH 100 beds or fewer At least 60 percent of inpatient days or discharges are Medicare Part A beneficiaries (42 CFR 412.108 for detail) 	 Inpatient: Standard IPPS + 75 percent of amount by which highest HSR exceeds PPS HSR derived from cost per discharge in base year (1982, 1987, 2002), adjusted for inflation and case mix Outpatient: Standard outpatient PPS 		
Rural Referral Center (RRC)	 Rural plus one of the following (42 CFR 412.96): 275 beds or more, or Most Medicare patients referred by outside providers AND most (services provided to) Medicare patients live 25+ miles away, or High case-mix + high discharge volume + one of the following: mostly specialty practitioners, most inpatients live 25 miles away, many patients referred by outside providers 	 Inpatient: Standard inpatient PPS; special treatment for Medicare DSH and geographic reclassification Outpatient: Standard outpatient PPS; receive inpatient reclassified wage index 		
Rural Community Hospital (RCH)	Demonstration model; extended in 2016 for 5 years (30 participating hospitals) Rural Fewer than 51 acute care beds 24-hour emergency services Not designated/ eligible to be CAH	Inpatient: 100 percent of reasonable costs (first year). Lesser of reasonable costs and target amount (subsequent year) Outpatient: Standard outpatient PPS		

Medicare Designations for Rural Hospitals (Continued)

Program	Eligibility Criteria	Medicare Payment			
Low-volume Adjustment (LVA)	Expired in 2017 but extended through 2022 with new criteria beginning in 2019: • Fewer than 3,800 total discharges • Located more than 15 road miles from the nearest subsection (d) hospital	 Inpatient: Sliding scale add-on: 25 percent for hospitals ≤ 500 total discharges to 0 percent for hospitals ≥ 3,800 total discharges Outpatient: Standard outpatient PPS 			
Ambulance Add-on Adjustment	Rural and "super" rural areas (lowest 25 percent in terms of population density)	 3 percent add-on to the ambulance fee schedule rate payment for trips originating in rural areas or rural census tracts of urban areas 22.6 percent increase in the base rate of the fee schedule for ground services originating in "super" rural areas 			

Sources

- United States Census Bureau. (2016 December 8). New Census Data Show Differences between Urban and Rural Populations. Release Number: CB16-210. Retrieved from: https://www.census.gov/newsroom/press-releases/2016/cb16-210.html
- 2. United States Census Bureau. (2010). Urban and Rural. Retrieved from: https://www.census.gov/geo/reference/urban-rural.html
- 3. Doekson, G.A., St. Clair, C.F., Eilrich, F.C. (2016 October). Economic Impact of a Critical Access Hospital on a Rural Community. National Center for Rural Health Works. Retrieved from: http://ruralhealthworks.org/wp-content/files/CAH-Study-FINAL-101116.pdf
- 4. America Hospital Association. (2018 March 29). Hospitals are Economic Anchors in their Communities. Retrieved from: https://www.aha.org/statistics/2018-03-29-hospitals-are-economic-anchors-their-communities
- 5. Williams, D. et al. (2018 August). Rural Hospital Mergers from 2005 through 2016. NC Rural Health Research Program. Retrieved from: http://www.shepscenter.unc.edu/download/17197/
- 6. Government Accountability Office. (2018 August). Rural Hospital Closures: Number and Characteristics of Affected Hospitals and Contributing Factors. Report to Congressional Requestors. Retrieved from: https://www.gao.gov/assets/700/694125.pdf
- 7. The Cecil G. Sheps Center for Health Services Research. (2018 January). 87 Rural Hospital Closures: January 2010-Present. Retrieved from: http://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/
- 8. U.S. General Accounting Office. (1990 June). Rural Hospitals: Factors That Affect Risk of Closure. Pub. No. GAO/HRD-90-134. Retrieved from: https://www.gao.gov/products/141713
- 9. Whitaker G. R., Holmes G. M., Pink H. G., (October 2016). The Impact of the Low Volume Hospital (LVH) Program on the Viability of Small, Rural Hospitals. NC Rural Health Research Program.1 7. Retrieved from: http://www.shepscenter.unc.edu/download/13871/
- 10. AHA 2017 Annual Survey Data
- 11. AHA 2017 Annual Survey Data
- 12. Sisk T. (2016 January 15). Study Finds Rural Hospitals Hurting in Medicaid Non-Expansion States. North Carolina Health News. Retrieved from: https://www.northcarolinahealthnews.org/2016/01/15/study-finds-rural-hospitals-hurting-in-medicaid-non-expansion-states/
- 13. Rural Health Information Hub. (2017 July 10). Rural Aging. Retrieved from: https://www.ruralhealthinfo.org/topics/aging
- Lam, O., Broderick, B., & Toor, S. (2018). How far Americans live from the closest hospital differs by community type. Pew Research Center. Retrieved from http://www.pewresearch.org/fact-tank/2018/12/12/how-far-americans-live-from-the-closest-hospital-differs-by-community-type/
- 15. Wishner J, Solleveld P, Rudowitz R, Paradise J, Larisa A. (2016 July 7). A Look at Rural Hospital Closure and Implications for Access to Care: Three Case Studies. Henry J Kaiser Family Foundation. Retrieved from: https://www.kff.org/medicaid/issue-brief/a-look-at-rural-hospital-closures-and-implications-for-access-to-care/view/footnotes/
- Wharma J. F., Zhang F, Eggleston E. M., Lu C. Y., Soumerai S, Ross-Degnan D. (2017 March 1). Diabetes Outpatient Care and Acute Complications Before and After High Deductible Insurance Enrollment: A Natural Experiment for Translation in Diabetes (NEXT-D) Study. PubMed. 177(3):358-368. doi: 10.1001. Retrieved from: https://www.ncbi.nlm.nih.gov/pubmed/?term=28097328
- 17. Johnt E. K., Nguyen N., Samson W. L., Snyder E. J. (2016 October 19). Rural Hospital Participation and Performance in Value-Based Purchasing and Other Delivery System Reform Initiatives. ASPE Office of Health Policy Retrieved from: https://aspe.hhs.gov/system/files/pdf/211061/RuralHospitalsDSR.pdf
- 18. Health Resource & Services Administration. (2018). Data Warhouse. Retrieved from: https://data.hrsa.gov/hdw/Topics/shortageareas.aspx
- 19. Green LV, Savin S, Lu Y. Primary care physician shortages could be eliminated through use of teams, nonphysicians, and electronic communication. Health Aff (Millwood). 2013;32(1):11-19.
- 20. Johnson S. (2018 June 25) New study reveals alarming shortage of mental health professionals in rural America. Big Think Smarter Faster. Retrieved from: https://bigthink.com/stephen-johnson/new-study-reveals-alarming-shortage-of-mental-health-professionals-in-rural-america
- 21. Mehrotra A., Jena A B., Busch A B., Souza J., Uscher-Pines L., and Landon B E. (2016 May 10) Utilization of Telemedicine among Rural Medicare Beneficiaries. Jama Network. Retrieved from: https://jamanetwork.com/journals/jama/fullarticle/2520619
- 22. MGMA Stat. (2018 May). Overcoming recruiting challenges for non-clinical staff in medical groups. Data Insights. Retrieved from: https://www.mgma.com/data/data-stories/overcoming-recruiting-challenges-for-non-clinical
- 23. MGMA Stat (208 May). MGMA Stat poll: Demand still high for qualified non-clinical applicants in healthcare industry. Retrieved from: https://www.mgma.com/news-insights/human-resources/mgma-stat-poll-demand-still-high-for-qualified-no
- 24. Petterson, S. M., Phillips Jr, R. L., Bazemore, A. W., & Koinis, G. T. (2013). Unequal distribution of the US primary care workforce. American family physician, 87(11).

- 25. Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling Towards Disease: Transportation Barriers to Health Care Access. Journal of Community Health, 38(5), 976–993.
- 26. Daly, R. (2017 December 20). Tax-exempt bonds preserved in final tax bill. Healthcare Financial Management Association. Retrieved from: https://www.hfma.org/Content.aspx?id=57421
- 27. MedPAC. (2018 March). Chapter 3: Hospital inpatient and outpatient services. March 2018 Report to the Congress: Medicare Payment Policy. Retrieved from http://www.medpac.gov/-documents-/reports
- 28. AHA 2017 Annual Survey Data
- 29. American Hospital Association. (2016). AHA Annual Survey Database. Retrieved from: http://www.ahadata.com/aha-annual-survey-data-base-asdb/
- 30. Garfield R, Damico A, Orgera K. (2018 June). The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid. Kaiser Family Foundation. Retrieved from: https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/
- 31. NC Rural Health Research Program. (2018). 95 Rural Hospital Closures: January 2010 Present. The Cecil G. Sheps Center for Health Services Research, University of North Carolina; www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/ (Note: In cases where closures occurred in Medicaid expansion states prior to their expansion, those closures are considered "non-expansion.")
- 32. Lindrooth R. C, Perraillon M. C, Hardy R. Y, Tung G. J. (2018 January). Understanding the Relationship between Medicaid Expansions and Hospital Closures. Health Affairs. Vol37, NO.1 Retrieved from: https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.0976
- 33. Tozzi J, Tracer Z. (2018 June). Some Big Employers Moving Away from High Deductible Health Plans. Insurance Journal. Retrieved from: https://www.insurancejournal.com/news/national/2018/06/26/493273.htm
- 34. Lenardson J, Ziller E, and Coburn A. (2014 May). High Deductible Health Insurance Plans in Rural Areas. Maine Rural Health Research Center. Retrieved from: http://muskie.usm.maine.edu/Publications/rural/High-Deductible-Insurance-Plans-Rural.pdf
- 35. Shawnda S. (2017 November). Rural Behavioral Health. Rural Health Research RECAP. Retrieved from: https://www.ruralhealthresearch.org/assets/658-1990/rural-behavioral-health-recap.pdf
- 36. Centers for Disease Control and Prevention. (2018 March 22). Suicide Policy Brief: Preventing Suicide in Rural America. Retrieved from: https://www.cdc.gov/ruralhealth/suicide/policybrief.html
- 37. Centers for Disease Control and Prevention. (2018 February 28). Drug Overdose in Rural America. Retrieved from: https://www.cdc.gov/rural-health/drug-overdose/index.html
- 38. Centers for Disease Control and Prevention. (2018 March 22). Suicide Policy Brief: Preventing Suicide in Rural America. Retrieved from: https://www.cdc.gov/ruralhealth/suicide/policybrief.html
- 39. White B.G. (2015 January 28). Rural America's Silent Housing Crisis. The Atlantic. Retrieved from: https://www.theatlantic.com/business/archive/2015/01/rural-americas-silent-housing-crisis/384885/
- 40. Tankersley J. (2016 May 22). A Very Bad Sign for All but America's Biggest Cities. The Washington Post. Retrieved from: https://www.washingtonpost.com/news/wonk/wp/2016/05/22/a-very-bad-sign-for-all-but-americas-biggest-cities/?noredirect=on&utm_term=.e37d9d844df1
- 41. Henderson T. Rural Counties are Making a Comeback, Census Data Shows. Pew Foundation. Retrieved from: https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2018/03/22/rural-counties-are-making-a-comeback-census-data-shows
- 42. Overberg P. (2017 December 29). The Divide between America's Prosperous Cities and Struggling Small Towns in20 Charts. The Wall Street Journal. Retrieved from: https://www.wsj.com/articles/the-divide-between-americas-prosperous-cities-and-struggling-small-town-sin-20-charts-1514543401
- 43. Adamy J., Overberg P. (2017 May 26). Rural America is the New 'Inner City'. The Wall Street Journal. Retrieved from: https://www.wsj.com/articles/rural-america-is-the-new-inner-city-1495817008
- 44. Centers for Medicare & Medicaid Services. (2018). National Health Expenditure Data. Retrieved from: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html
- 45. NORC at the University of Chicago. (2016 October 11) Trends in Hospital Inpatient Drug Costs: Issues and Challenges. American Hospital Association and the Federation of American Hospitals. Retrieved from: https://www.aha.org/system/files/2018-01/aha-fah-rx-report.pdf
- 46. U.S. Department of Health and Human Services. (2018 March 6). What is the U.S. Opioid Epidemic? Retrieved from https://www.hhs.gov/opioids/about-the-epidemic/index.html
- 47. U.S. Department of Agriculture. (2018) Opioid Misuse in Rural America. Retrieved from: https://www.usda.gov/topics/opioids
- 48. U.S. Department of Agriculture (2018). Opioid Misuse in Rural America. Retrieved from: https://www.usda.gov/topics/opioids
- 49. Kurtzleben D. (2018 October). Poll: Rural Americans Rattled by Opioid Epidemic; Many Want Government Help. National Public Radio. Retrieved from: https://www.npr.org/2018/10/17/656515170/poll-rural-americans-rattled-by-opioid-epidemic-many-want-government-help

- 50. Ellison A. (2016 February 12). The Number of Armed Security Guards in Hospitals is Growing- so is the debate over their necessity. Becker's Clinical Leadership & Infection Control. Retrieved from: https://www.beckershospitalreview.com/quality/the-number-of-armed-security-guards-in-hospitals-is-growing-so-is-the-debate-over-their-necessity.html
- 51. Neff L. (2016). Human trafficking cases rise in Wisconsin, U.S. Wisconsin Gazette. Retrieved from: https://www.wisconsingazette.com/news/human-trafficking-cases-rise-in-wisconsin-u-s/article_1ef2bf08-9a6e-5db2-8b1f-ba9f1d97ca8d.html
- 52. Polaris Project. (2016). The Facts. Retrieved from: https://polarisproject.org/human-trafficking/facts
- 53. Polaris Project. (2016 April) Health Care Professionals on the Frontline of Helping Trafficking Victims. Retrieved from: https://polarisproject.org/blog/2016/04/14/healthcare-professionals-frontline-helping-trafficking-victims
- 54. Polaris Project. (2016 April 14) Healthcare Professionals on the Frontline of Helping Trafficking Victims. Retrieved from: https://polarisproject.org/blog/2016/04/14/healthcare-professionals-frontline-helping-trafficking-victims
- 55. U.S. Department of Health & Human Services. (2012 February 14). What is Medical Surge? Retrieved from: https://www.phe.gov/Prepared-ness/planning/mscc/handbook/chapter1/Pages/whatismedicalsurge.aspx
- 56. American Hospital Association (2017 November). Regulatory Overload: Assessing the Regulatory Burden on Hospitals, Health Systems and Post-acute Care Providers. Retrieved from: https://www.aha.org/system/files/2018-02/regulatory-overload-report.pdf
- 57. Mehrotra A, Jena AB, Busch AB, Busch B. J., Souza J., Uscher-Pines L., Landon E. B. (2016 May 10)Utilization of Telemedicine among Rural Medicare Beneficiaries. JAMA. Retrieved from: https://doi.org/10.1001/jama.2016.2186
- 58. Mehrotra A, Jena AB, Busch AB, Busch B. J., Souza J., Uscher-Pines L., Landon E. B. (2016 May 10). Utilization of telemedicine among rural Medicare beneficiaries. JAMA. Retrieved from: https://doi.org/10.1001/jama.2016.2186
- 59. American Hospital Association. (2018 April). Fact Sheet: Telehealth. Retrieved from: https://www.aha.org/system/files/2018-04/fact-sheet-telehealth-2018.pdf
- 60. Levitz J and Bauerlein V. (2017 June 15). Rural America is Stranded in the Dial-Up Age. The Wall Street Journal. Retrieved from: https://www.wsj.com/articles/rural-america-is-stranded-in-the-dial-up-age-1497535841
- 61. American Hospital Association. (2018 August 2). FCC Seeks Comments on Proposals for Connected Care Pilot Program. Retrieved from: https://www.aha.org/news/headline/2018-08-02-fcc-seeks-comments-proposal-connected-care-pilot-program
- 62. Azar A. (2018 July 16). RE: RIN 0991-ZA49; HHS Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs. American Hospital Association. Retrieved from: https://www.aha.org/system/files/2018-07/180716-aha-hhs-blue-print-to-lower-drug-prices.pdf
- 63. Tribble J. S. and Lupkin S. (2017 February 14). Duchenne Drug Delayed After Outrage Over Price, National Public Radio, Retrieved from: https://www.npr.org/sections/health-shots/2017/02/14/515046376/duchenne-drug-delayed-after-outrage-over-price
- 64. Szabo, L. (2017 March 15). As Drug Costs Soar, People Delay Or Skip Cancer Treatments. National Public Radio. Retrieved from: https://www.npr.org/sections/health-shots/2017/03/15/520110742/as-drug-costs-soar-people-delay-or-skip-cancertreatments
- 65. Fox M. (2018 January 3). Luxturna gene therapy for blindness to cost \$850,000.NBC News. Retrieved from: https://www.nbcnews.com/health/health-news/luxturna-gene-therapy-blindness-cost-850-000-n834261
- 66. Herman, B. (2018 March 21). Drug prices are still going through the roof. AXIOS. Retrieved from: https://www.axios.com/drugprices-explod-ing-2017-1521564090-aa025591-9e50-491d-b3e2-c981e85adb60.html
- 67. Tirrell, M. (2018 March 9). Martin Shkreli's legacy: Putting a 'fine point' on the drug pricing debate. CNBC. Retrieved from: https://www.cnbc.com/2018/03/09/martin-shkrelis-legacy-shaping-the-drug-pricing-debate.html
- 68. Azar A. (2018 July 16). RE: RIN 0991-ZA49; HHS Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs. American Hospital Association. Retrieved from: https://www.aha.org/system/files/2018-07/180716-aha-hhs-blue-print-to-lower-drug-prices.pdf
- 69. 2AHA 2015 Annual Survey Data
- 70. American Hospital Association. (2018 March). In 2015 Alone, 350 B Tax-exempt Hospitals Provided Over \$50 Billion in Total Benefits to their Communities. Retrieved from: https://www.aha.org/system/files/2018-03/340b-community-benefit-analysis.pdf
- 71. AHA 2015 Annual Survey Data
- 72. Jones Sanborn B. (2018 July 20). Here's a look at where clinicians are flocking to new jobs and what practice settings they prefer. Health-care Finance. Retrieved from: https://www.healthcarefinancenews.com/news/heres-look-where-clinicians-are-flocking-new-jobs-and-what-practice-settings-they-prefer
- 73. Sullivan T. (2018 May 5). Interstate Medical Licensure Compact- Expands to 17 States. Policy & Medicine A Rockpointe Publication. Retrieved from: https://www.policymed.com/2016/06/interstate-medical-licensure-compact-expands-to-17-states.html



Advancing Health in America

Chicago Office:

155 N. Wacker Drive, Suite 400 Chicago, IL 60606 312.422.3000

Washington Office:

800 10th Street, NW Two CityCenter, Suite 400 Washington, DC 20001 202.638.1100



www.aha.org



#RuralHealth

©2019 American Hospital Association February 2019