

# Rural Action Plan



**US Department  
of Health and  
Human Services**

**September 2020**

## Table of Contents

Message from the Secretary .....	1
Executive Summary .....	3
Section I. Introduction.....	5
Section II. Setting the Rural Context .....	7
Section III. The Four-Point Strategy to Transform Rural Health and Human Services .....	16
Section IV. Upcoming Actions to Support Rural America.....	19
Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities .....	19
Strategy 2: Leverage Technology and Innovation .....	24
Strategy 3: Focus on Preventing Disease and Mortality.....	28
Strategy 4: Increase Rural Access to Care.....	35
Section V. Highlighting Recent Rural Efforts .....	39
Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities .....	39
Strategy 2: Leverage Technology and Innovation .....	44
Strategy 3: Focus on Preventing Disease and Mortality.....	46
Strategy 4: Increase Rural Access to Care.....	54
Conclusion.....	59
Appendix A: Upcoming Actions to Support Rural America .....	60
Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities .....	60
Strategy 2: Leverage Technology and Innovation .....	60
Strategy 3: Focus on Preventing Disease and Mortality.....	62
Strategy 4: Increase Rural Access to Care.....	64
Appendix B: Highlighting Recent Rural Efforts.....	65
Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities .....	65
Strategy 2: Leverage Technology and Innovation .....	66
Strategy 3: Focus on Preventing Disease and Mortality.....	69
Strategy 4: Increase Rural Access to Care.....	74
Citations .....	75

## Message from the Secretary

One of the top priorities of the Trump Administration is enhancing the way we deliver health and human services in rural areas. There are 57 million residents in rural America, spread across 80 percent of the country's landmass. Across these communities, U.S. Department of Health and Human Services (HHS) programs and resources play an important role, from providing preschool and childhood development services through Head Start to enhancing access to health care through Critical Access Hospitals (CAHs) or community health centers or ensuring that families achieve self-sufficiency through Temporary Assistance for Needy Families (TANF).

In response, the HHS Rural Task Force developed this Rural Action Plan as the next step for the Department to enhance its focus on rural communities. We realize we cannot maintain the status quo approach for rural America. That is why we developed the Secretary's Four-Point Strategy to Transform Rural Health and Human Services, which builds on current HHS initiatives in the following areas:

- Build a Sustainable Health Model for Rural Communities;
- Leverage Technology and Innovation;
- Focus on Preventing Disease and Mortality; and
- Increase Rural Access to Care.

Rural communities are places of great vitality and innovation, with a strong spirit of collaboration. They are key producers of the nation's food supply and play a central role in supporting energy production while serving as an integral part of the larger national economy. Rural areas face challenges in access to care, financial viability, and demographic and structural issues. Their residents tend to be older and in poorer health than urban counterparts. Rural residents are more likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke than their urban counterparts.

The deep impact of the COVID-19 pandemic is nationwide, but particularly challenging for rural communities given a limited health care infrastructure, fewer clinicians, and a host of other barriers. As we continue to take the steps necessary to respond to this public health emergency it only reinforces how critical it is that rural issues continue to be a priority for HHS.

When you are selecting priorities as a leader, you do not pick particular challenges just because they are pressing problems—though certainly that is a criterion. You also pick something as a priority because it requires more than just continuing business as usual—it requires transformation. There is no better example of an area that needs this transformation than the delivery of rural health and human services. We realize that one size does not fit all. There is a need to think differently about how HHS engages with rural communities and how our programs and regulations can best meet the needs of rural communities.

For that reason, in late 2018, I created a Rural Task Force at HHS, with key leaders and stakeholders from across the Department. The goal of the Task Force is to bring together disparate efforts across HHS and develop the best understanding of where policy and program changes can help bring about the needed transformation.

So what have we been thinking about so far?

Our goals for rural health and human services are simple: they need to be affordable; they need to be accessible; they need to be high quality; they need to be sustainable; and they need to be innovative.

The HHS Rural Action Plan represents an important step in our work with rural America. It includes key initiatives we have already taken to align with those goals. For example, we have expanded access to care in rural communities by increasing the number of community health centers that serve rural areas. We have taken steps to help rural providers make the transition to value-based care, with the goals of improving quality and reducing the growth of health care spending. HHS programs have helped address the opioid epidemic in rural communities. Through changes to Medicare, we have also expanded access to telehealth services, allowing us to bridge the gaps in care in rural communities. This has been particularly true in response to the COVID-19 pandemic as we made rule changes in Medicare that have allowed clinicians across the country to provide care virtually in response to the public health emergency.

The HHS Rural Action Plan builds on the momentum of these efforts and includes a variety of programs slated for implementation in Fiscal Year (FY) 2020. This report covers a variety of programs authorized by Congress and administered by HHS. However, it is important to note that based on assessment of the effectiveness of some of these efforts, HHS does not include funding for some of these programs in the FY 2021 President's Budget request. HHS continues to evaluate the effectiveness of these programs as statutorily required. The President's FY 2021 Budget proposal also includes a focus on rural health and human service transformation that range from key regulatory efforts to reduce burden and expand access as well as targeted rural program investments in maternal health and enhancing access to Human Immunodeficiency Virus (HIV) care. All of this adds up to an unparalleled focus on rural issues for HHS, which is only heightened by the emergence of COVID-19 and its impact on rural communities.

Meeting the needs of rural communities relies on expanding our partnerships; and the HHS Rural Task Force will expand its collaboration with federal partners as well as its private-sector partners. This combined effort will expand the breadth and reach of our impact on rural communities.

*Alex M. Azar II*  
*Secretary, U.S. Department of Health and Human Services*

## Executive Summary

In 2018, Secretary Alex M. Azar II identified rural health as a Department of Health and Human Services (HHS) priority. The Secretary created the HHS Rural Task Force to better understand the Department's current and planned efforts to strengthen HHS coordination to better meet the needs of the 57 million Americans who live in rural communities. One of the outcomes of the work of the Rural Task Force is this Rural Action Plan, which provides an initial framework and set of activities designed to meet those goals.

Rural Americans face unique challenges in terms of access to health and human services. Individuals in rural areas tend to be older, with higher rates of chronic disease and lower life expectancy. As the nation's largest payer of health care services and funder of social services, HHS is in the position to address a range of factors that influence rural health care outcomes and access to social services.

The Rural Action Plan provides a description of the current rural health care and human services landscape, particularly the challenges rural individuals and communities face in accessing and financing health care and human services. The characteristics of rural health and human service disparities include poorer health status, with residents of rural areas more likely than their urban counterparts to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke, and to have health care and human service workforce shortages, fragile provider networks, and the limited and varied capabilities of public health and human services departments, among others. In acknowledgment of these rural health disparities, the foundation of the Rural Action Plan is based on the following Four-Point Strategy:

1. ***Build a Sustainable Health and Human Services Model for Rural Communities*** by empowering rural providers to transform service delivery on a broad scale.
2. ***Leverage Technology and Innovation*** to deliver quality care and services to rural communities more efficiently and cost-effectively.
3. ***Focus on Preventing Disease and Mortality*** by developing rural-specific efforts to improve health outcomes.
4. ***Increase Rural Access to Care*** by eliminating regulatory burdens that limit the availability of needed clinical professionals.

The HHS Rural Action Plan is comprised of five segments, which tie back to a least one of the elements of the Four-Point Strategy:

Section I, "Introduction" provides background on the formative issues that went into the development of this Rural Action Plan.

Section II, "Setting the Rural Context," describes the health challenges faced by rural communities, including an examination of rural health disparities, health and human service workforce issues, and the primary elements of health and human service infrastructure.

Section III elaborates on "The Four-Point Strategy to Transform Rural Health and Human Services" and identifies opportunities for partnerships across the federal government.

Section IV, “Upcoming Actions to Support Rural America,” sets forth a variety of new policy and program initiatives HHS is taking in 2020 and beyond to execute the Four-Point Strategy. These include new or enhanced program investments, technical assistance, and expanded research efforts in the coming year. This section also describes important rural proposals from the President’s FY 2021 Budget.

Finally, Section V, “Highlighting Recent Rural Efforts,” details steps HHS has already taken to support rural communities.” This section emphasizes a number of actions the Department has taken to invest in rural communities, reduce regulatory burden, and expand the scope of its research efforts to include more studies and assessments that are rural-centric.

This Rural Action Plan represents a major HHS strategic commitment to leverage all of the Department’s programs to improve rural health. HHS cannot do this alone. In the development of this Rural Action Plan, advice and input were solicited prior to the COVID-19 pandemic from other federal agencies, associations and foundations, and other stakeholders that care about rural health and human services. In implementing the Rural Action Plan, HHS is partnering with other federal agencies and also working with states, tribal and local governments, and private enterprise to deliver on this Four-Point Strategy for America’s rural residents.

This plan builds on past HHS efforts and resources and provides a framework to enhance future work. For example, as part of this work, HHS will undertake new efforts such as:

- A new initiative to address the social determinants of health of rural older adults and people with disabilities.
- Support research on how to improve screening for the physical and mental illnesses that disproportionately affect rural residents.
- Develop toolkits to assist integration efforts between community health centers, rural hospitals, and tribes.

HHS acknowledges that additional challenges due to the COVID-19 pandemic have arisen following the development of this Rural Action Plan. These unprecedented challenges will continue to affect the rural health and human services infrastructure; therefore, these issues will need to be addressed concurrently with the other challenges detailed in this Rural Action Plan.

## Section I. Introduction

There are 57 million rural residents in the United States spread over 80 percent of the country's landmass.<sup>1</sup> This population plays an important role in food and energy production, while serving as an integral part of the national economy.<sup>2</sup>

The U.S. Department of Health and Human Services (HHS) has a long-standing investment and interest in rural communities. HHS's programs play a critical role in supporting the health and human service infrastructure and providing services in rural areas across the country. This support comes through a variety of mechanisms, ranging from targeted rural grant programs to payments for health care delivered by rural providers. In 2018, HHS funded approximately \$8 billion in individual grants that went directly to rural communities.<sup>3</sup> In addition, the Department provides health care coverage through Medicare, Medicaid, and the Children's Health Insurance Program (CHIP). HHS human service programs support child care and early childhood development programs as well as services for older adults and people living with disabilities. The Department plays a crucial role in supporting research and analysis to better understand diseases, conditions, and trends that disproportionately or differentially affect rural populations. States and local governments have an important role in helping rural communities address health and human service challenges and, in some cases (e.g., Medicaid), share some costs with the federal government in supporting these efforts.

While HHS's past efforts are important, it is clear that more can be done by working strategically to coordinate rural efforts across HHS, especially among the groups most vulnerable to health disparities. In 2018, the Secretary identified rural health and human services as a priority for the Department, resulting in the creation of the HHS Rural Task Force that consists of leaders and staff from across the Department. The Secretary charged the Task Force with bringing together the disparate efforts across HHS in order to develop the best understanding of where policy and program changes can support rural communities. Through this Task Force, the Secretary brought greater awareness to these rural issues across the Department and created a platform highlighting how HHS programs and activities addressed rural challenges over the past three years.

Over the past 18 months, the Department leadership and the Task Force sought the input of rural stakeholders, state governors, and members of Congress. For example, research has shown people with disabilities have unique and greater challenges compared to the general rural population and people with disabilities in urban areas.<sup>4,5,6,7</sup> Those efforts played an essential role in keeping the work of the Task Force grounded and relevant.

These efforts culminated in this first-ever HHS Rural Action Plan. Section II sets the context for rural health and human services in rural America, while Section III outlines a Four-Point Strategy. That Strategy will guide the Department's rural actions moving forward, which are described in Section IV. This section describes new policy and program efforts that will begin in the coming months, as well as several rural proposals that were included in the President's FY 2021 Budget. Those future steps will build on some of the rural work already underway across HHS, which is detailed in Section V.

This Rural Action Plan includes information collected prior to the COVID-19 pandemic from other federal agencies, associations and foundations, and other stakeholders that care about rural health and human services. HHS acknowledges that additional challenges have arisen following the development of this Rural Action Plan due to this public health emergency. Over the coming months, the HHS Rural Task Force will focus on understanding the impact of COVID-19 on rural communities and identify strategies and program initiatives to address those concerns.



## Section II. Setting the Rural Context

### ***Defining Rural***

*Regardless of the definition used, the rural population makes up between 15 and 20 percent of the population. There are a number of ways to define rural areas. The Census Bureau and the Office of Management and Budget (OMB) provide the primary classification systems. The Census Bureau defines urbanized areas (core population of 50,000 or more) and urban clusters (core population of 2,500-49,999) with all other areas classified as rural. OMB classifies geographic areas as core-based statistical areas using the Census Bureau's urbanized areas as the core of metropolitan areas and urban clusters of at least 10,000 people as the core of micropolitan areas, with counties as the key unit of measurement. There are additional classifications used by federal programs but all build off either the OMB or Census standards. For the purposes of this Rural Action Plan, rural is defined as all non-metropolitan counties (micropolitan and non-core counties) based on the OMB standard unless otherwise noted.*

Rural<sup>8</sup> Americans face numerous health challenges, including:

- Rural residents are more likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke than their urban counterparts.<sup>9</sup>
- A number of rural hospitals are closing (that is, ceasing to provide inpatient services)<sup>10</sup> or have a high degree of financial risk.<sup>11</sup> Between January 2010 and July 2020, 130 rural hospitals closed.<sup>12</sup> The impacts of these closures vary by community.<sup>13</sup>
- Financial distress is linked to closure risk. However, many rural hospitals lack enough patient volume to be sustainable under traditional health care reimbursement mechanisms. From 2015 to 2017, the average occupancy rate of a hospital that closed was only 22 percent.<sup>14</sup> Factors contributing to reduced rural hospital volumes include, but are not limited to, declining population, market changes, and patient bypass to other facilities.<sup>15</sup>
- Fewer and fewer of these facilities are delivering babies, which may adversely affect access to obstetric (OB) services in rural communities.<sup>16</sup> The percentage of U.S. rural counties that lacked hospital OB services increased from 45 percent in 2004 to 54 percent in 2014, due to hospital and OB unit closures.<sup>17</sup> Rural areas also have higher rates of maternal mortality and higher rates of infant mortality.<sup>18</sup>
- The ability to recruit and retain physicians, nurses, and all other types of providers—long a challenge in rural America—continues to limit access to care.<sup>19</sup> A lack of behavioral health providers is particularly pronounced in rural areas, with 17 percent of non-metropolitan (non-core) counties lacking behavioral health providers contrasted with three percent in metropolitan counties.<sup>20</sup>
- Specialty care is less accessible due to distance and travel required; people with disabilities and older Americans are disproportionately affected by these and other social determinants of health.<sup>21</sup> According to results from a survey of Rural Health Clinics (RHCs) that was published in December 2019, respondents attributed access challenges to a lack of specialty care providers in rural areas, with limited appointment availability, distance, and transportation being the other top reasons for having difficulty in making

timely referrals to specialists.<sup>22</sup> Furthermore, these barriers for older Americans and people with disabilities are frequently compounded by a lack of physical accessibility at the offices of many health care providers and a lack of access to accessible medical diagnostic equipment.<sup>23</sup>

Many of these challenges are longstanding and finding sustainable solutions has been elusive, especially when their causes often lie beyond the clinical setting. Increasingly, public policy leaders, including HHS Secretary Alex Azar, recognize the impact of a broader range of social and economic realities, or social determinants of health,<sup>24</sup> that affect health equity.<sup>25</sup> In any assessment of rural health and human services, it is helpful to take into account the broader context of rural America.

After several years of decline, the rural population has increased slightly, due mostly to a cohort of people moving from urban areas. This comes at a time when rural areas have a lower fertility rate and an aging population. However, rural areas are not homogenous, and these trends vary greatly from region to region. While rural areas are generally less racially and ethnically diverse than urban areas, there are regions with more racial and ethnic diversity (e.g., the Southeast compared to the Great Plains).<sup>26</sup> Rural areas also have a larger proportion of people with disabilities and older adults than urban areas.<sup>27,28</sup> Rural areas have been slower to recover from the Great Recession (which started in 2007), particularly in terms of job growth.<sup>29</sup> Rural poverty has declined since then, but is still higher than urban areas and concentrated in different locations such as some tribal areas, the Mississippi Delta, and Appalachia.<sup>30</sup> Job loss and other effects of the COVID-19 pandemic may exacerbate these concerns.

<b>Rural/Urban Comparison</b>		
<b>Income/Health Status/Age</b>	<b>Rural</b>	<b>Urban</b>
Median household income (2016)	\$46,000	\$62,000
Poverty rate (2016)	16.9%	13.6%
Physically inactive (2012)	27.8%	22.3%
Percent Age 65+ (2016)	18.4%	14.5%

Source: Rural Health Research Gateway<sup>31</sup> Recap: Rural Communities Age, Income, Health Status, November 2018.

In 2018, private insurance rates were higher for urban populations (68 percent compared to 62 percent) whereas rural areas had higher rates of public health insurance relative to urban areas (42 percent compared to 33 percent).<sup>32</sup> Additionally, Medicare and Medicaid are critically important to older Americans and people with disabilities.<sup>33,34</sup> Moreover, the clinical infrastructure in many rural areas is more limited, with a focus on primary care and chronic disease management and less access to specialty care.<sup>35</sup> There are also gaps in oral<sup>36</sup> and mental health services.<sup>37,38</sup>

## **Rural Health Disparities**

Rural areas continue to face serious health disparities. In comparison to their urban counterparts, the rural population tends to have higher rates of smoking, hypertension, and obesity, as well as limitations in their ability to perform basic activities of daily living.<sup>39</sup> In addition, suicide rates are also higher in rural areas.<sup>40</sup> Industries such as mining, quarrying, oil, and gas extraction and agriculture, which are highly concentrated in rural areas, are among the top five industries with higher suicide rates than found in the general population.<sup>41</sup>

The high rate of avoidable or excess death due to drug overdoses is a particular concern for rural residents.<sup>42</sup> Rural Americans often lack access to medical providers generally available in urban areas. Recent research found that rural residence is associated with a 40 percent higher preventable hospitalization rate and a 23 percent higher mortality rate for rural populations. Research also indicates that having one or more visits to a specialist in the prior year lowered the preventable hospitalization rate while lowering the mortality rate for those with chronic conditions.<sup>43</sup>

The drivers of rural mortality (education level, employment, etc.) are not categorically different from urban areas, but the effect appears to have a more significant impact on rural communities.<sup>44</sup>

Rural areas also face hurdles related to maternal and child health. Infant mortality rates have long been higher in rural communities relative to urban areas, such that the former has a nine percent greater probability of severe maternal morbidity and mortality.<sup>45,46</sup> Racial and ethnic minorities are at an increased risk of adverse maternal outcomes as hospital closures are more likely to occur in communities with a higher percentage of Black, Hispanic, and unemployed residents.<sup>47,48,49</sup>

While these disparities are noteworthy, they also mask other important considerations. Rural racial and ethnic minority populations face even more challenges in terms of access to care and related health care challenges. These racial and ethnic disparities in rural areas are often overlooked.<sup>50</sup>

## **Workforce**

The shortage of rural clinicians, described as a national mal-distribution of providers, is a defining policy issue for rural and tribal areas. There are fewer primary care providers (PCPs) (physicians, nurse practitioners, and physician assistants) practicing in rural areas relative to urban areas. There are 5.4 of these PCPs per 10,000 population in rural areas, relative to 7.9 per 10,000 in urban areas.<sup>51</sup> There are fewer mental health and oral health clinicians in rural areas. Rural areas have 3.6 dentists per 10,000 population compared to 5.9 in urban areas.<sup>52</sup> Research also shows that rural adults have fewer dental visits and more permanent tooth loss compared to urban adults.<sup>53</sup> Mental health services are similarly scarce in rural communities. Of the 1,971 rural counties in the United States, 252 counties have no mental health provider.<sup>54</sup>

<b>2019 Health Professional Shortage Area (HPSA) Designations</b>			
<b>Percent of HPSA Designation</b>	<b>Rural</b>	<b>Partially Rural</b>	<b>Non-Rural</b>
Primary Care	62.93%	6.09%	30.92%
Dental	64.44%	4.96%	30.53%
Mental Health	60.98%	7.18%	31.78%

Notes: Rural as defined by Health Resources and Services Administration (HRSA) Bureau of Health Workforce (BHW). Source: Designated Health Professional Shortage Areas (HPSA) Quarterly Summary, December 31, 2019.

Given the more limited number of clinicians in rural areas, these communities are more likely to be designated as Health Professional Shortage Areas (HPSAs), indicating a shortage of needed clinicians. Consequently, rural and tribal areas rely heavily on programs such as the National Health Service Corps (NHSC), which provides loans and scholarships to eligible clinicians to work in qualifying HPSAs. Currently, 36 percent of the clinicians who receive NHSC loan repayment or scholarships are placed in rural areas.<sup>55,56</sup> Federally Qualified Health Centers (FQHCs) and some RHCs automatically qualify as facility HPSAs and often rely on NHSC clinicians. State governments also have a key role for addressing workforce needs through how they set scope of practice and licensure. States are also a funder of health professional training programs as well as scholarship and loan programs.

### **Rural Providers**

Rural communities rely on a patchwork of small rural hospitals, clinics, small primary care practices, nursing homes, and physician practices for many of their health care needs. FQHCs<sup>57</sup> and RHCs<sup>58</sup> are key parts of the rural primary care infrastructure and receive enhanced payment rates under Medicare and Medicaid. The expansion of the Health Center program has had a significant impact on rural communities, as one in five rural residents uses a FQHC.<sup>59</sup> FQHCs, are often a source of dental, mental health, and substance use disorder (SUD) services in a rural community.

<b>Rural Provider Types</b>	
<i>Rural Hospital Types (Medicare-Enrolled Facilities), 2018</i>	
<b>Designation</b>	<b>Total in United States</b>
Critical Access Hospitals	1,346
Sole Community Hospitals (SCHs)	321
Medicare-Dependent Hospitals (MDHs)	143
Rural Referral Centers (RRCs)	256
SCHs/RRCs (i.e., facilities that are both SCHs and MDHs)	125
MDHs/RRCs (i.e., facilities that are both MDHs and RRCs)	16

<i>Primary Care Types, 2018</i>	
Designation	Total in United States
Rural Health Clinics	4,230
Health Centers	Approximately 13,000 service delivery sites nationwide, serving 1 in 5 rural residents

Source of FQHC data: HRSA Bureau of Primary Health Care (BPHC) analysis of 2018 Uniform Data System (UDS) data; Source of data for all other provider types: University of North Carolina, Cecil G. Sheps Center for Health Services Research analysis of data for Centers for Medicare & Medicaid Services (CMS) providers reported open on January 1, 2018.

Many rural hospitals have Medicare designations such as CAHs,<sup>60</sup> Sole Community Hospitals,<sup>61</sup> or Medicare Dependent Hospitals.<sup>62</sup> These designations cover more than two-thirds of the country’s approximately 2,000 rural hospitals. The rate of rural hospitals closing or suspending their inpatient operations has increased over the past few years. Between 2010 and 2019, an average of 12 hospitals per year closed completely or converted to another type of facility that no longer provided inpatient services.<sup>63</sup> A slight majority of the facilities that have closed did not qualify for these designations. In addition, HHS-funded analysis shows that financial risk is rising for non-CAH rural hospitals.<sup>64</sup> As noted earlier, more than half of the country’s rural counties do not have hospital-based OB services. This results in more out-of-hospital births, more pre-term births, and more births in rural hospitals that do not offer OB services and may be ill-equipped to address an emergency delivery.<sup>65</sup>

The rural health infrastructure goes beyond hospitals and clinics. Post-acute care providers, ranging from home health agencies and skilled nursing facilities to nursing homes and hospice providers, also provide health care in rural areas. The availability of those resources is variable and little recent research has been conducted to quantify these health care services.

Many of these health care providers face ongoing financial viability challenges. Rural hospitals are particularly affected by policy changes to Medicare; across all payers, Medicare paid for an average of 59.2 percent of rural (non-core) hospital inpatient days as compared to 49.4 percent for urban hospital inpatient days in 2017.<sup>66</sup> Structurally, rural health care providers can face struggles in covering their costs given the lower volume of patients and high fixed costs. As a result, Congress has developed a series of payment systems and adjustments in Medicare, as outlined above, to offset some of these structural challenges ranging from rural area-specific hospital designations to extra payments for rural home health<sup>67</sup> or rural ambulance services.<sup>68</sup> Those payment adjustments have helped, but do not fully address the challenges.

### **Public Health Infrastructure**

Public health is a shared responsibility between the public and federal, state, and local governments. HHS provides funding to support these efforts through awards to the states such as Centers for Disease Control and Prevention’s (CDC’s) Preventive Health and Health Services Block Grant, Health Resources and Services Administration’s (HRSA’s) Maternal and Child Health Block Grant, and Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) mental health and SUD funding. HHS continues to evaluate the effectiveness of these programs as statutorily required.

Rural public health departments are less likely than urban health departments to provide direct patient care in the form of clinical preventive services. Rural public health departments rely on Medicaid payments as well as state and federal grant funds for operating revenue.<sup>69,70</sup>

### **Rural Emergency Medical Services (EMS)**

Rural areas are heavily reliant on emergency medical services (EMS), given their geographic isolation and potentially long distances to receive any level of trauma services. Rural EMS providers are a mix of volunteer and professional ambulance service providers who work closely with small rural hospitals and larger tertiary centers to provide initial trauma services and to triage and transport more serious cases. These providers face the challenges of high operational costs, the aging of EMS volunteers, and low patient volumes that can often put a strain on rural EMS agencies. To partially account for these factors, Medicare adjusts payments for rural ambulance services that meet certain eligibility requirements.<sup>71</sup>

### **Rural Human Services**

The human service sector includes a mix of programs focused on the beginning and end periods of life as well as support for low-income families. Programs targeting childcare, youth services, and low-income families are largely funded through block and competitive grants at the Administration for Children and Families (ACF), and HRSA funds home visiting and Healthy Start.

HHS also supports many programs focusing on older adults and persons with disabilities. For example, states with the Money Follows the Person (MFP) demonstration program represent a federal initiative to give people needing long-term services and support (LTSS) more choice about where they live and receive care, and to increase the capacity of state LTSS systems to serve people in community settings. Many states have leveraged the MFP demonstration to support Medicaid eligible individuals in rural communities who wish to transition from long-term care facilities to the community.

Some rural areas face ongoing challenges meeting the needs of the rural elderly population, which is growing.<sup>72</sup> Shortages of workers in the long-term service and support system is an issue nationally, and there are concerns that the nation's system is especially limited in rural areas.<sup>73</sup> Given outmigration factors in some rural communities, some older adults may lack family and caregiver support. Older adults in rural areas may suffer from social isolation at significant rates.<sup>74</sup> All of these factors create long-term challenges for rural communities and the older adults that live there.

### **Leveraging Technology**

Technology can play an important role in supporting rural communities and serve as a way to bridge distance and reduce geographic isolation, as well as isolation due to physical inaccessibility.<sup>75</sup> Telehealth services can link rural residents to health care services not available locally, as well as support other applications such as distance learning and remote monitoring. Particularly during the COVID-19 pandemic, telehealth has played a critical role with people continuing to receive health care while practicing social distancing.<sup>76</sup>

*Unless otherwise indicated, references to “telehealth” in this document refer broadly to health care and related services that are provided with the use of telecommunications technology, and are not limited to Medicare telehealth services described under section 1834(m) of the Social Security Act.*

Overall, telehealth use is increasing, particularly in the areas of mental health and primary care, according to a Journal of the American Medical Association (JAMA) study using data from the American Medical Association.<sup>77</sup> HHS, through Medicare, Medicaid, and CHIP, reimburses telehealth services. Utilization of telehealth in Medicare is limited though growing, according to a 2018 Centers for Medicare & Medicaid Services (CMS) Report to Congress.<sup>78</sup> For the past few years, CMS has taken several steps to expand the number of telehealth and other communications technology-based services under Medicare as well as steps to expand the use of telehealth in Medicare Advantage (MA) plans. Most state Medicaid programs cover at least some services that may be provided via telehealth, though that varies widely across the United States. One study indicates that utilization remains relatively low but is growing.<sup>79</sup>

CMS has expanded the availability of communications technology-based services to Medicare beneficiaries in rural areas in unprecedented ways. In 2019, CMS implemented separate payments under the Medicare Physician Fee Schedule for virtual check-in services and remote evaluations of recorded videos and/or images that a patient submits to their clinician, as well as adding those as services of RHCs and FQHCs.

CMS provided broader telehealth flexibilities in response to the emergency pandemic declaration, which has helped clinicians across the country to expand the use of telehealth. COVID-19 has also led to states utilizing telehealth in ways that they had not prior to the pandemic, and the long term impact of these changes is not yet known.<sup>80</sup>

Recent changes through the Bipartisan Budget Act of 2018 and the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities (SUPPORT) Act reduce restrictions on where a Medicare patient must be located to receive certain services via telehealth starting in Calendar Year (CY) 2019 for receiving home dialysis End Stage Renal Disease (ESRD) related services, acute stroke-related services, and treatment of SUDs and co-occurring mental health disorders. The Bipartisan Budget Act of 2018 also allows, beginning in 2020, MA organizations to offer additional telehealth benefits and allows certain Accountable Care Organizations (ACOs) to be paid for telehealth services furnished in any geographic location and, if appropriate, in the patient’s home. For the duration of the public health emergency, a wide range of services included as Medicare telehealth services are paid under the Medicare Physician Fee Schedule at the same rate that would have been paid if furnished in-person, with an additional facility fee available for the originating site in most cases. Telehealth benefits in MA organizations are included in their overall payment rates as basic benefits with an option of offering additional services as supplemental benefits and funded through the use of rebate dollars and/or supplemental premiums paid by enrollees.

Technology in the field of telehealth must also be inclusive of communication accessibility for individuals with disabilities per laws such as Section 504 of the Rehabilitation Act and the Americans with Disabilities Act that protect qualified individuals with disabilities from

discrimination on the basis of disability in the provision of benefits and services. To provide these individuals with effective communications, covered entities must provide auxiliary aids and services when needed. Providers can discuss what aid or service is appropriate with the person with a disability making the request.<sup>81</sup>

While telehealth holds great promise, the clinical evidence base is somewhat limited. The impacts of some applications such as home monitoring and tele-mental health services are well documented, while research is still needed in other clinical areas.<sup>82</sup> Greater use of this technology is constrained by a number of policy challenges, including (but not limited to) payment, licensure, and portability.

Rural areas continue to identify access to broadband as a challenge compared to their urban peers.<sup>83</sup> This is not only an issue for telehealth, but it has implications for making full use of broader health information technology (health IT) efforts such as fully leveraging electronic health records, health information exchange, and the emerging use of home-based remote patient monitoring and mobile medical/health applications. Gaps in broadband also may inhibit rural communities' use of distance learning and limit small business development and remote employment. This may further reduce options for rural communities that tend to be more widely available in urban and suburban areas.

HHS recognizes further investments in broadband may help bridge the gaps between rural and urban areas and reduce geographic isolation. This can play a fundamental role in leveraging health IT across the Department's programs.

### **Quality and Value**

The quality of health care varies in rural areas, just as in urban and suburban areas. The research findings are mixed when comparing the quality of care in rural versus urban hospitals.<sup>84</sup> Some studies have found higher mortality rates associated with small rural hospitals,<sup>85</sup> while others report approximately the same rate as urban areas.<sup>86</sup> The measurement of quality in rural areas is challenging due to low patient volumes, which results in a lack of appropriate sample sizing. Low volume can also preclude public reporting for rural providers if the measures for the providers do not meet minimum reporting thresholds.<sup>87</sup> This may present challenges as rural providers seek to take part in value-focused programs, which use quality measures to link to payment. However, some rural providers are taking part in value-based efforts and finding some success.

With respect to the adjustments made to inpatient prospective payment system (IPPS) payments under the Medicare Value-Based Purchasing Program for hospitals, a number of rural hospitals did not have enough volume to be included in the program. Rural hospitals that were included in the program were more likely to receive a positive payment adjustment.<sup>88</sup> Under the Hospital Readmissions Reduction Program, research reported no difference in the proportion of rural and urban hospitals receiving penalties.<sup>89</sup> In the Quality Payment Program's first year (2017 performance period with a payment adjustment in 2019), clinicians had the option to pick their pace of participation, which allowed more flexibility in the number and types of measures and activities that were necessary to report to exceed the established performance threshold.<sup>90</sup> As a result, 94 percent of eligible rural clinicians participated. CMS reported that 93 percent of rural clinicians eligible for the Merit-based Incentive Payment System (one of the two Quality



Payment Program tracks) in 2017 received a positive payment adjustment; furthermore, 65 percent of those eligible clinicians received an additional adjustment for exceptional performance.<sup>91</sup> ACOs in rural and underserved areas that participated in CMS's ACO Investment Model also showed lower Medicare spending.<sup>92</sup>

### **The Rural Public Policy Challenge and Opportunity**

Rural areas face a dilemma – many are heavily dependent on federal and state programs to help address service and infrastructure gaps. This dependence means they are adversely affected by policy changes and program regulations that, at times, fail to take into account structural challenges in rural areas. Public policy solutions are often geared toward larger population areas, creating unintended consequences for rural residents (e.g., the Medicare Disproportionate Share Hospital (DSH) payment cap and MA Star Rating, among others).<sup>93</sup> Public policy makers also face challenges in fully understanding the dimensions of specific rural health and human service issues. Federal program data collection, analysis, and research does not always assess differences between rural and urban areas. For example, HHS broadly collects and analyzes health-related data on gender, ethnicity, and race, but may not capture rural-urban differences and miss differential trends or impacts for rural residents.

At the same time, the lower population of rural areas can create opportunities for creativity and change because they can pivot quickly. Rural communities often have a tradition of networking, collaboration, and resourcefulness necessitated by their limited resources, facilitating the need to work collectively and cut across sectors. Despite some of the demographic and structural challenges facing rural areas, these communities can test for new approaches in a rapid timeframe. Small and modest investments can have a disproportionate impact on these areas.

## Section III. The Four-Point Strategy to Transform Rural Health and Human Services

In recognition of the opportunities and challenges faced by rural communities, the HHS Rural Task Force has developed a “Four-Point Strategy to Transform Rural Health and Human Services.” The strategy will allow the Department to identify specific actions to empower local communities to improve rural health and human service outcomes. The strategy builds on current HHS rural efforts and expands them in the following areas:

1. ***Build a Sustainable Health and Human Services Model for Rural Communities*** by empowering rural providers to transform service delivery on a broad scale.
2. ***Leverage Technology and Innovation*** to deliver quality care and services to rural communities more efficiently and cost-effectively.
3. ***Focus on Preventing Disease and Mortality*** by developing rural-specific efforts to improve health outcomes.
4. ***Increase Rural Access to Care*** by eliminating regulatory burdens that limit the availability of needed clinical professionals.

The strategy builds on past HHS efforts and resources to support rural communities but also provides a strategic framework to enhance the way the Department supports rural America. It addresses many of the challenges raised in Section II (“Setting the Rural Context”) and gives the Department a consistent and structured way to focus its efforts to support health and human service delivery in rural communities.

The Secretary’s Four-Point Strategy serves as a framework for collaborating across HHS agencies with other federal departments, states, counties, and non-governmental agencies and will be an essential part of Department efforts in addressing rural health and human service challenges. HHS can enhance rural community success in combatting these long-standing challenges, along with new ones due to the COVID-19 pandemic, by working collaboratively with other partners.

### **Key Partners**

While this report details HHS specific initiatives, in the coming months, HHS will expand its collaboration efforts with important rural programs within the United States Department of Agriculture (USDA), the U.S. Department of Veterans Affairs (VA), the Federal Communications Commission (FCC), and the Regional Commissions.

### **USDA**

Serving rural communities is deeply embedded throughout the USDA. The USDA Rural Development (RD) portfolio provides loans, grants, and loan guarantees to help create jobs and support economic development and essential services such as housing, health care, first responder services and equipment, and water, electric, and communications infrastructure. In addition to RD, other parts of the USDA support rural communities. For example, the National Institute of Food and Agriculture (NIFA) funds the Cooperative Extension System, which helps enhance rural health and safety through research and education while the Division of Youth and 4-H is leading the effort to expand access to meaningful positive youth development. The Food and Nutrition Service increases food security and reduces hunger by providing children, older

adults, tribes, and families with access to food, a healthy diet, and nutrition education. Together these programs help people become economically independent and encourage healthful lifestyles.

## **FCC**

Through its administration of the Healthcare Connect Fund, the FCC works to increase access to broadband for eligible health care providers, especially those serving rural areas. This initiative seeks to foster the development and deployment of broadband health care networks and to focus on ensuring the cost-effectiveness of the FCC's universal service health care program. This program provides an essential source of support for helping rural health care providers fully leverage the promise of health IT, including expanded use of telehealth.

## **VA**

There are 4.7 million rural veterans with 2.7 million enrolled in VA. Rural veterans are more likely than urban veterans to be enrolled in the VA health care system, with 57 percent of rural veterans enrolled, which is significantly higher than the 37 percent of urban veterans enrolled.<sup>94</sup> Veterans experience rural health care challenges that may be intensified by combat-related injuries and illnesses. Rural veterans tend to be older medically-complex patients. Nearly 460,000 rural veterans served in Iraq and Afghanistan and are likely to have multiple medical and combat-related challenges, which will require significant on-going access to care.

A number of veterans, many from rural areas, have been able to obtain some of their care outside of the VA system through the current Veterans Choice program, which will soon evolve into the Community Care program. This option could help rural veterans, who live a considerable distance from a VA facility, access health care closer to home from a rural clinic or hospital. Currently, HHS collaborates with the VA on clinical care and workforce efforts. As a next step for the HHS Rural Task Force, the Department will enhance its coordination on rural veterans' health issues. For example, the VA has been an innovator in the use of electronic health records and telehealth, and lessons learned from their experience could inform HHS efforts.

## **Regional Commissions**

The Appalachian Regional Commission (ARC) and the Delta Regional Authority (DRA) are federal-state partnerships that focus on economic development and infrastructure investment. DRA and ARC serve largely rural regions and have been principal partners for HHS. As part of the ongoing work of the HHS Rural Task Force, the Department will expand its collaboration with these regional partners.

## **Additional Federal Partnerships**

After establishing these initial federal partnerships, the Rural Task Force will expand that to other departments such as the U.S. Department of Housing and Urban Development, the U.S. Department of Education, and the U.S. Department of Labor.

## **Looking Forward**

HHS's ongoing focus on rural issues do not take place in isolation. The potential to work with other federal partners will serve to expand our impact in rural communities. Ultimately, the goal is to improve and enhance rural America. This creates a natural alignment with HHS's longstanding emphasis on population health that is embodied in the Healthy People (HP)

initiative. Through this work, HHS provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, HP has established benchmarks and monitored progress over time in order to:

- Encourage collaborations across communities and sectors.
- Empower individuals toward making informed health decisions.
- Measure the impact of prevention activities.

The rural disparities noted earlier (chronic disease burden, lower life expectancy, higher mortality, etc.) are years in the making. Research shows that rural areas lag behind their urban counterparts in many of the HP 2020 focus areas.<sup>95</sup> As a new decade begins, those gaps—while daunting—also represent an opportunity. The broader goals set forth in HP 2030 provide a framework to renew our efforts toward addressing rural disparities.

Many of the specific HP 2030 goals for improvement are in areas where there are rural-urban differences. The HP 2030 Foundation Measures Archive notes that geography should be accounted for in measuring disparities.<sup>96</sup> That focus provides an opportunity for the HHS Rural Task Force to align its efforts with the HP 2030 activities. This requires a long-term focus and calls for a concerted effort at the federal, state, and local level.

HHS is committed to marshalling its resources to reach these goals. The work of the Department's Rural Task Force and the release of the Rural Action Plan represent the first coordinated focused effort on rural health in more than 15 years and a first step in this broader effort.

## Section IV. Upcoming Actions to Support Rural America

This section describes the new or expanded rural HHS efforts within the context of the Secretary's Four-Point Strategy to Transform Rural Health and Human Services. These new proposals link directly to concerns raised in Section II ("Setting the Rural Context") while also aligning with other HHS and administration priority areas, such as:

- Advancing kidney health
- Ending the HIV Epidemic
- Ending the crisis of opioid addiction and overdose
- Addressing maternal mortality and morbidity
- Working to transform the health care system to one that pays for value

This section details key upcoming rural investments and policies that are underway or will begin implementation later in 2020. The section also highlights rural-focused program and policy proposals from the President's FY 2021 Budget. Appendix A includes a broader list of additional planned programs, initiatives, stakeholder engagement, research, analysis, and technical assistance. This includes some items that may not be rural-specific but may have an impact on rural populations or includes rural as a potential focus area. The list is not exhaustive and reflects either new activities to address rural health and human service issues in the coming year, or expanded upon past successful rural projects proposals from key agencies and offices across HHS.

### **Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities**

#### Policy and Regulatory Efforts

##### CMS

- Preserving Access to Essential Hospital Services in Rural Areas

The President's FY 2021 Budget includes a legislative proposal allowing CAHs to voluntarily convert to an emergency hospital that does not maintain inpatient beds. Currently, Medicare pays CAHs 101 percent of reasonable costs for most inpatient and outpatient services, but conditions eligibility for these higher payments on meeting certain statutory and regulatory requirements, including furnishing acute care inpatient hospital services. This new facility type would receive the same Medicare payment rates as other emergency departments (EDs) paid under the outpatient prospective payment system, plus an additional payment to assist with capital costs. The capital cost adjustment equals 10 percent of the five-year average of the facility's payment.

- Addressing Rural Challenges with the Medicare Wage Index

The President's FY 2021 Budget includes a legislative proposal that would create a statutory demonstration to test comprehensive wage index reform. Disparities exist between high-wage index and low-wage index hospitals. The demonstration would redefine the labor market area to reflect commuting data by ZIP Code, identify an

alternative source for wage data, repeal the rural floor and other reclassifications and specific payment adjustments (e.g., out-migration adjustment), and provide civil monetary penalty authority to penalize hospitals that submit inaccurate or incomplete data. The demonstration would aim to improve hospital wage index accuracy, reduce sharp differences in the wage index and Medicare payments between nearby hospitals, address the divergence between low-wage and high-wage hospitals, and protect access to health care in rural areas.

#### HHS Immediate Office of the Secretary (IOS)

- National Advisory Committee on Rural Health and Human Services

HHS will charge the National Advisory Committee on Rural Health and Human Services, chaired by former Kansas Governor Jeff Colyer, with identifying emerging rural policy issues affecting rural communities and making recommendations on how to address those challenges. The Committee, which is made up of 21 national rural experts, will issue twice yearly reports to the Secretary on those topics and consult regularly with the Department leadership to inform its ongoing rural agenda.

- Enhancing HHS's Focus on Telehealth

HHS is elevating the role of the Office for the Advancement of Telehealth (OAT) to create a focal point on telehealth that will serve as a resource across HHS and enhance coordination with other key federal and private sector partners. This effort builds on the key regulatory and program investments in the wake of the COVID-19 pandemic that have expanded the use of telehealth nationally. OAT, while located in HRSA, will have an HHS-wide charge to link together the Department's broad efforts in leveraging telehealth to improve access, enhance outcomes, and support clinicians and patients.

#### HHS Collaborations

- Maximize the Impact of Grant Making on Rural Health

HHS will take several steps to assist rural communities to effectively compete for grant funding. Rural communities face challenges when applying for grants. Current definitions of "rural" vary greatly from one agency to another. Changing demographics make the applicability of some geographic standards less relevant to reality, potentially excluding rural communities from applying for resources. In addition, rural organizations often lack the administrative and organizational capacity of their well-resourced urban and suburban counterparts, making it challenging for the former to compete for needed funding.

- The Federal Office of Rural Health Policy (FORHP) in HRSA will issue a Request for Information (RFI) seeking public comment on ways to revise its definition of rural, which is used to determine eligibility for multiple rural health grant programs. HHS has charged FORHP with revising its definition to address concerns from researchers and stakeholders that some rural areas are misclassified as urban because

of factors such as commuting flows. With public input, HHS will refine the current rural definition to ensure that truly rural areas are eligible for the FORHP grant funding. The refined rural definition will also then be available for use by other HHS programs.

- Within the ACF, the Administration for Native Americans will support four regional training and technical assistance centers to conduct pre-application and post-award training to help their programs' applicants and grantees succeed in both the application stage and during grant management phase. The centers also provide training focused on community engagement and project development. More information about training and technical assistance resources is at: <https://www.acf.hhs.gov/ana/assistance>.

## Research and Analysis

### ACF

- Understanding Human Services Programs in Rural Contexts (HSPRC)

ACF will produce the HSPRC report to examine a wide array of human services with a focus on four ACF programs: Health Profession Opportunity Grants (HPOG); Healthy Marriage and Responsible Fatherhood; Maternal, Infant, and Early Childhood Home Visiting (MIECHV); and Temporary Assistance for Needy Families (TANF). The report aims to (1) describe human services programs in rural contexts; (2) determine the unmet need for human services in rural contexts; and (3) identify opportunities for strengthening the capacity of human services to promote economic and social well-being of individuals, families, and communities in rural contexts. This effort began in October 2019 and will continue through September 2022. More information about this effort is at: <https://www.acf.hhs.gov/opre/research/project/human-services-programs-in-rural-contexts>.

### Agency for Healthcare Quality and Research (AHRQ)

- Data Analyses Using AHRQ Datasets to Understand Rural Health

In 2020, AHRQ will conduct analyses of datasets to better understand differences in volume and intensity of opioid utilization across the rural-urban continuum in the United States, food insecurity and expenditures on medical care in rural communities, and rural-urban differences in the perceived value of health insurance and risk tolerance.

### HRSA

- Rural Health Research Center (RHRC) Program

In FY 2020, FORHP is providing four-year awards to seven RHRCs for a total of \$4.9 million per year. The RHRC program supports policy-relevant health services research to assist health care providers and policy-makers at the federal, state, and local levels in better understanding the challenges faced by rural communities and in designing policies

to improve health care access and population health. Research funded under this cooperative agreement will cover an array of topics including access to care, quality, workforce, mental and behavioral health, and health disparities and will be publicly available on the Rural Health Research Gateway at: <https://www.ruralhealthresearch.org/>.

#### National Institutes of Health (NIH)/National Institute of General Medical Sciences (NIGMS)

- Centers of Biomedical Research Excellence (COBRE)

In FY 2020, NIH/NIGMS expects to invest approximately \$28 million to fund new COBRE Phase 1 awards. The Institutional Development Award (IDeA) program aims to foster health-related research activities in states and territories where levels of NIH research funding have been historically low. The COBRE funding initiative supports the establishment and development of innovative, state-of-the-art biomedical and behavioral research centers at institutions in IDeA-eligible states through awards for three sequential five-year phases. Applications addressing health challenges of rural populations in IDeA states are encouraged.

For rural health focused COBRE's a Community Engagement and Outreach (CEO) Core is required to facilitate the research. The CEO Core will engage the community in identifying important health concerns and lead collaborations with Practiced-based Research Networks (PBRNs) in conducting research that addresses health challenges facing the rural community. Examples of projects focusing on rural health disparities include studies that address translational science barriers, improve access to clinical trials for rural communities, and harness technology to simultaneously deliver effective care and facilitate research. More information about the COBRE Phase 1 awards is at: <https://grants.nih.gov/grants/guide/pa-files/PAR-19-313.html>.

#### NIH/National Institute on Minority Health and Health Disparities (NIMHD)

- Resource Hubs to Promote Multi-Sectoral Rural Health Research

In FY 2020, NIMHD is investing \$1 million for a one-year pilot initiative to support resource hubs in rural areas that involve a coalition of stakeholders from multiple service sectors (e.g. health, public health, education, transportation, and housing) and researchers. These hubs will foster partnerships and leverage resources needed to conduct collaborative rural health disparities research, including pilot projects for junior researchers. The initial investment will be through five administrative supplements to existing NIMHD-funded center grants to develop resource hubs and support pilot projects. If the pilot is successful, NIMHD will fund a full initiative in partnership with other NIH Institutes and Centers and possibly other agencies within HHS to support multi-year resource hubs. The focus of the hubs will be to understand and address the multi-faceted, multi-level causes of rural disparities in disease risk, prevalence, and mortality. The initial pilot grants to existing NIMHD centers will be released in July 2020.



## Technical Assistance

### HRSA

- Assistance to Rural and Tribal Communities in Developing Integrated FQHC-CAH/Small Rural Hospital Services

HRSA will fund a \$500,000 contract to develop a toolkit and roadmap for FQHCs to use with CAHs and other rural hospitals interested in pursuing greater integration or moving to a fully integrated system. This shift has the potential to provide communities a full continuum of care—from primary and preventive to inpatient and emergency services—in a structure that maximizes economies of scale in communities where populations are unable to sufficiently support two separate organizations. Once the toolkit becomes available, up to 20 interested communities with potential community health center-CAH pairings will receive technical assistance from a HRSA-supported contractor. This contract is currently slated for release in summer 2020.

- Technical Assistance for At-Risk Rural Hospitals

FORHP is funding several initiatives in FY 2020 to provide technical assistance to at-risk rural hospitals. The total investment for these three programs is approximately \$11.6 million.

- *Rural Healthcare Providers Transition Project*: This new funding opportunity provides support for hospitals and RHCs to build foundations that support providers in successful participation in a value-based environment. More information about this initiative is at: <https://www.hrsa.gov/grants/find-funding/hrsa-20-099>.
- *Vulnerable Rural Hospitals Assistance Program*: This program provides targeted in-depth technical assistance to vulnerable rural hospitals struggling to maintain health care services with the aim for rural communities to continue to have access to essential health care services. More information about this initiative is at: <https://www.hrsa.gov/sites/default/files/hrsa/ruralhealth/vulnerable-rural-hospital-assistance-prog.pdf>.
- *Delta Region Community Health Systems Development Program*: This initiative enhances health care delivery in the Mississippi Delta region through an intensive multi-year on-site technical assistance program to health care facilities in rural communities, targeting the needs of each community. More information about this initiative is at: <https://www.hrsa.gov/sites/default/files/hrsa/ruralhealth/deltaregion-community-hthsys.pdf>.

## Indian Health Service (IHS)

- Training the Next Generation of Rural Health Care Providers - Expanding the Community Health Aide Program to the Contiguous 48 States

The Community Health Aide Program (CHAP) is a multidisciplinary system of mid-level behavioral, community, and dental health professionals working alongside licensed providers to offer patients increased access to quality care. IHS received \$5 million in FY 2020 to support the implementation of the national CHAP across the contiguous 48 states. This includes investments in:

- National program development
- CHAP provider certifications
- Tribal stakeholder engagement
- Support for Tribally-operated CHAPs

CHAPs was established and funded by Congress in 1968 to address significant unmet needs during an epidemic in Alaska. Over the years, the program has expanded to systematically train community health aides and practitioners to offer patients increased access to quality care. In addition, CHAPs maintain a system of certifying community health aides, who have completed training and are competent to provide disease prevention, as well as health care and promotion services, in rural Alaska. In 1992, Congress made CHAP a permanent program in Alaska and, in 2010, it permitted the IHS to develop a national CHAP to promote the objectives in the Indian Health Care Improvement Act.

## SAMHSA

- Rural Opioid Technical Assistance (ROTA) Grants

For FY 2021, SAMHSA will expand the ROTA grant program to new USDA Extension Centers serving additional rural communities. The purpose of the additional grants is to expand the integration of mental illness and substance use prevention and training capacity.

## Strategy 2: Leverage Technology and Innovation

### HHS Competitions

- Through the America COMPETES Reauthorization Act of 2010, HHS can use appropriated funds towards the use of challenges and prize competitions as a tool for innovation. Since 2011, over 170 challenges, \$35 million in cash prizes, and over 9,000 innovators have participated in prize and challenge competitions across the United States. More information is at: <https://www.hhs.gov/cto/initiatives/open-innovation/about/index.html>. As part of the ongoing HHS Rural Task Force efforts, two HHS agencies have developed challenges for 2020.

## Administration for Community Living (ACL)

- Network Prize Competition to Address Social Determinants of Health (SDoH): Innovative Technology Solutions for Social Care Referrals

In FY 2020, ACL is announcing a prize competition for \$500,000 to support the development and testing of innovative technology solutions for social care referrals. This project, while not rural-specific, could result in new approaches of sharing data between health and human service providers that would be particularly useful for geographically isolated rural communities. Additional information about the challenge is at: <https://www.challenge.gov/challenge/innovative-technology-solutions-for-social-care-referrals/>.

- Up to 10 Innovation Awards to Address Social Determinants of Health for Older Adults and Persons with Disabilities

In FY 2020, ACL is announcing approximately 10 innovation awards to community-based organization networks to address the social determinants of health of older adults and people with disabilities in partnership with health payers and community-based providers. These awards include an emphasis on rural communities.

## AHRQ

- Health Challenge to Improve Screening and Management of Post-Partum Depression for Rural Women

In FY 2020, AHRQ issued a competitive challenge to design a solution to improve screening and management of post-partum depression for rural women. Approximately 13 percent of American women experience post-partum depression (PPD) the year after giving birth, and PPD may be especially challenging for new mothers living in rural areas who face access, cost, and transportation barriers. The goal of this challenge is to utilize technology to provide customized screening and education for new mothers in rural communities, offer clinical resources and support for all new mothers, and create linkages to primary care and specialized mental health care for women experiencing PPD. The AHRQ challenge will spur the development of potential solutions and award prizes for the most promising ideas. Future efforts may fund the testing and evaluation of the challenge winners.

## Grants

### HRSA

- Expand Support for Telehealth

In FY 2020, HRSA is leveraging approximately \$30 million to support approximately 62 awardees to expand the use of telehealth to meet the needs of rural and medically underserved areas with a particular focus on tele-emergency and tele-behavioral health

services. More information about FORHP's telehealth investments is at: <https://www.hrsa.gov/rural-health/telehealth/>.

- *Telehealth Network Grant Program (TNGP)*: Beginning in FY 2020, FORHP is investing, through a new funding opportunity, approximately \$8.7 million over four years to support up to 29 new organizations under the TNGP. The program aims to promote rural tele-emergency services by enhancing networks' capacity to deliver 24-hour ED consultation services, without emergency care specialists, via telehealth. The focus on tele-emergency services for the TNGP is a result of research that supports the effectiveness of tele-stroke and tele-behavioral health in emergency rooms, as well as evidence that indicates a low volume of telehealth service utilization from EDs. Additional information is at: <https://www.hrsa.gov/grants/find-funding/hrsa-20-036>.
- *Continuation Awards*: Through non-competing continuation awards, FORHP is supporting 14 awards under the Evidence-Based Tele-Behavioral Health Network Program (EB THNP), 14 awards under the Telehealth Resource Centers, two awards under the Licensure Portability Grant Program, and two awards under the Telehealth Centers of Excellence.

## SAMHSA

- Increased Funding for School-Based Mental Health Programs

The President's FY 2021 Budget proposes \$156 million, an increase of \$2 million, for school-based mental health programs such as Project AWARE, Healthy Transitions, and Mental Health First Aid. These programs support the Federal Commission on School Safety recommendations through grants to states and communities to increase access to mental health services, train school personnel, emergency first responders, law enforcement, and families to recognize signs and symptoms of mental disorders, particularly serious mental illness. The funds will also support hiring 30 behavioral health aides for rural populations, development and implementation of telehealth strategies, and training to identify signs of mental illness and appropriate response. This new effort will reach 40,000 students across five states.

## Policy and Regulatory Efforts

### CMS

- Extend "distant-site" eligibility to additional health care provider types

The President's FY 2021 Budget includes a significant focus on expanding telehealth. This multifaceted proposal expands Medicare Fee-for-Service's telehealth benefit by removing existing barriers to telehealth services for providers participating in Medicare fee-for-service advanced Alternative Payments Models, which require more than nominal financial risk. This proposal would also require the Secretary to value telehealth services separately from similar services provided face-to-face for purposes of setting reimbursement rates in Medicare. This proposal broadens beneficiary access to Medicare

telehealth services and addresses longstanding stakeholder concerns that the current statutory restrictions hinder beneficiary access, while ensuring Medicare is paying for value over volume.

Currently, Medicare only pays for telehealth services if furnished by physicians or certain non-physician practitioners as the distant site providers to beneficiaries at certain types of originating sites located in mostly rural geographic areas. The Budget proposal would allow RHCs and FQHCs to be distant site providers for Medicare telehealth services and to be reimbursed for these services at a composite rate similar to payment for comparable telehealth services under the Medicare Physician Fee Schedule. This proposal would level the playing field by allowing these health care facilities to participate more broadly in the existing Medicare telehealth program. It would also increase beneficiaries' access to care in rural areas where these clinics and centers are often the only source for primary care. Note: Section 3704 of the Coronavirus Aid, Relief, and Economic Security (CARES) Act amended the statute as described above for the duration of the COVID-19 Public Health Emergency.

The President's FY 2021 Budget also includes a legislative proposal to expand access to Medicare telehealth services for IHS and Tribal facilities. Currently, Medicare covers some types of telehealth services, but does not expressly cover telehealth services provided across state lines. In the IHS system, telehealth practitioners are often located in a different state from the patient and are not licensed, registered, or subject to the law of the state where the patient is located and receiving such services. This IHS proposal allows all IHS and tribal facilities to bill Medicare for telehealth services as originating and distant sites under the Physician Fee Schedule, even if the facility does not meet the requirements for being located in certain rural or shortage areas, including coverage for telehealth services provided across state lines. Explicitly authorizing IHS and tribal health programs to receive Medicare payment as originating and distant sites for telehealth services will accommodate the unique federal authorities that allow IHS and tribal health programs to operate across state lines and without limitations to state licensure requirements.

- Expand Plan Options through Telehealth for Rural Beneficiaries in Medicare Advantage

In a final rule published on April 16, 2019 (84 FR 15680), CMS finalized requirements for MA plans offering additional telehealth benefits (ATBs), which offer patients the option to receive health care services from places like their homes, rather than requiring them to go to a health care facility. In a recent final rule published on June 2, 2020 (85 FR 33796), CMS adopted policies to take steps to improve access to managed care options in rural areas through changes in network adequacy assessments for MA plans and to take into account the impact of telehealth providers in contracted networks, which CMS believes will encourage use of telehealth access. Specifically, in rural areas, CMS reduced (compared to its current policies) the required percentage of beneficiaries that must reside within the maximum time and distance standards from 90 percent to 85 percent. To encourage and account for telehealth providers in contracted networks, CMS will provide MA plans with a 10 percent credit towards the percentage of beneficiaries that must reside within required time and distance standards when the plan contracts with

telehealth providers for the following specialty types: Dermatology, Psychiatry, Cardiology, Neurology, Otolaryngology, Ophthalmology, Allergy and Immunology, Nephrology, Primary Care, Gynecology/OB/GYN, Endocrinology, and Infectious Diseases.

## Research and Analysis

### HRSA

- Telehealth Focused Rural Health Research Center (TF RHRC) Program

In FY 2020, HRSA's FORHP is making two awards for approximately \$1.9 million per year through the TF RHRC. The program will explore the impact of telehealth investments on rural areas and populations, to include an assessment of access, cost, experience, and effectiveness for patients and providers. This research will assist decision-makers at the federal, state, and local levels by examining the impact of investments of telehealth services in rural communities on access to health care, population health/health indicators, health care spending (both for payers and for the patients receiving the services), quality of care, value-based care, workforce, business strategy, and clinical delivery of care. One awardee will focus on evaluation, and the other awardee will focus on building the evidence base for using telehealth to provide services in rural communities.

## **Strategy 3: Focus on Preventing Disease and Mortality**

### Grants

### HRSA

- Rural Community Opioids Response Program (RCORP)

In FY 2020, RCORP is investing an additional \$110 million in rural communities through its Implementation, Planning, and new Neonatal Abstinence Syndrome (NAS) Programs. HRSA anticipates making 169 awards in total. RCORP is a multi-year opioid-focused initiative aimed at reducing the morbidity and mortality of SUD, including opioid use disorder (OUD), in rural communities at the highest risk for SUD. RCORP funds multi-sector consortia to enhance their ability to implement and sustain SUD/OUD prevention, treatment, and recovery services in underserved rural areas. More information about RCORP is at: <https://www.hrsa.gov/rural-health/rcorp>.

- Addressing HIV Issues in Rural Communities

In FY 2020, HRSA's HIV/AIDS Bureau (HAB) and the Bureau of Primary Health Care (BPHC) are working together to focus on the rural dimensions of the Ending the HIV Epidemic Initiative. As a separate but aligned effort to this Department priority, FORHP has identified a targeted rural approach.

- HAB released 60 awards for a total of \$63 million to Ryan White HIV/AIDS Program recipients. The program’s purpose is to link people, who are either newly diagnosed or are diagnosed with HIV but currently not in care, to essential care, treatment, support services, workforce training, and technical assistance. This program while not exclusively rural will have significant impact for rural communities.
- BPHC released 195 awards for nearly \$54 million in supplemental funding to health centers with service delivery sites in locations identified under the Initiative. Health centers will use the supplemental funding to expand HIV prevention services that decrease the risk of HIV transmission in geographic areas with high rates of new HIV infection, focusing on supporting access to and use of pre-exposure prophylaxis (PrEP).
- FORHP is competing up to 10 Rural HIV/AIDS Planning Program, for a total of \$1 million (\$100,000 each), focusing on the seven states (Alabama, Arkansas, Kentucky, Mississippi, Missouri, Oklahoma, and South Carolina) identified as rural with high rates of new HIV infections under the Ending the HIV Epidemic Initiative. Most of the existing service sites in those regions are FQHCs. HAB will then link these new grantees to the AIDS Education Training Centers to be part of the planning efforts to support the development of broad-based networks to serve this population.
- Healthy Rural Hometown Initiative

The Healthy Rural Hometown Initiative is a five-year multi-program effort to identify strategies to address the underlying factors that drive growing rural disparities related to heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke.<sup>97</sup> This initiative has two phases. The first is to align and target community-focused funding streams within FORHP to address the underlying factors that affect growing rural disparities related to these five causes of excess death.<sup>98</sup> Beginning in FY 2020, HRSA is implementing strategies to target approximately 20 percent of its rural community-based programs to focus on these disparities and encourage award recipients to include human service providers and state Medicaid stakeholders in their networks to both improve health and reduce long-term costs associated with treatment.

The second phase of this initiative will work across other HHS entities to leverage other programs and research funding streams to ensure the Department’s efforts address the underlying factors that drive rural disparities in these causes of potential excess death.

- Expanding the Rural Maternity and Obstetrics Management Strategy (RMOMS) Program

The President’s FY 2021 Budget proposes \$12.4 million to expand the RMOMS pilot beginning in FY 2021. This program supports the development of new models that improve access to and continuity of maternal OB care in rural communities. This program, funded through FORHP’s Outreach Grant program, focuses on healthy pregnancies and births by improving the quality of care in rural areas through better coordination of maternal and OB care, the use of regional partnerships, and expanded use

of telehealth. This effort aligns with the HHS priority area of addressing maternal mortality for rural women.

## SAMHSA

- First Responders-Comprehensive Addiction and Recovery Act (FR-CARA)

SAMHSA continues to support FR-CARA grant program, which seeks to develop best practices for prescribing and co-prescribing Food and Drug Administration (FDA)-approved overdose reversal drugs, and to train and provide resources to first responders and members of key community sectors on administering emergency treatment of opioid overdose. Of the \$36 million appropriated, \$18 million is set aside for rural communities.

- Tribal Opioid Response Grant Program

Beginning in FY 2020, SAMHSA is investing \$50 million per year for a multi-year effort to increase the number of tribes who have Tribal Opioid Response grant funding. The purpose of this funding is to increase access to culturally appropriate and evidence-based treatment, including Medication-Assisted Treatment (MAT). The intent is to reduce unmet treatment need and opioid overdose-related deaths through the provision of prevention, treatment, and/or recovery activities for OUD. SAMHSA plans to make approximately 100 awards and anticipates that the majority of the applicants will be in rural communities.

## Research and Analysis

### CDC

- Immunizations in Rural Communities

In (CY) 2020, CDC's National Center for Immunization and Respiratory Diseases (NCIRD) is conducting interviews in rural communities with health care providers, parents, and other members of the community to better understand facilitators and barriers to providing vaccinations in rural communities. Findings from this initiative will help improve the understanding of appropriate interventions and explore potential strategies to improve vaccination coverage in rural communities.

- Improving the Understanding of Rural Community Opioid Response Effort

In 2020, CDC's National Center for Injury Prevention and Control (NCIPC) continues to support two projects focused on the opioid crisis in rural areas with a particular focus on hard-hit communities in Appalachia (Kentucky and West Virginia case studies). CDC will share findings with rural communities via its rural webpages, publications, and through partners' communication channels (e.g., HRSA, National Rural Health Association, Rural Health Information hub, National Organization of State Offices of Rural Health, and National Association of County and City Health Officials). CDC expects to share details in winter 2020.



- *Kentucky Case Study*

This project is taking a deeper look at several counties in Eastern Kentucky that have seen declines in drug overdose mortality rates over the past decade, even as overdose rates have risen in the state of Kentucky as a whole, as well as in the Appalachian regions of neighboring states such as Pennsylvania, Ohio, and West Virginia. NACCHO and the National Opinion Research Center (NORC) is exploring reasons for the declines in these counties with the greatest decline in drug overdose mortality in order to help local health departments and jurisdictions better understand opioid overdose rates. Results from this project will also assist local agencies build their opioid response capacity, identify interventions, and the impact of their implementation in these effected rural communities.

Findings from this work are expected to help improve the understanding of opioid response efforts in rural communities and may lead to policy considerations that could reduce the risk of opioid overdose in other rural communities. The CDC expects to share details in winter 2020.

- *West Virginia Case Study*

This case study is identifying the impact of critical elements of the opioid response in Cabell County to understand the role of public health system partners on the effectiveness of system delivery and utilization in the opioid response and to identify actionable factors for translating the opioid response to other communities. This project is also incorporating a community Adverse Childhood Experiences (ACEs) needs assessment. This work builds on ongoing efforts within HHS to combat the opioid overdose epidemic. The evaluation is expected to help improve the understanding of opioid response efforts in rural communities, and will provide insights on how public health and other community partners are able to move past traditional barriers through collaboration to make community and systems-level change to combat drug overdose. Findings are expected to be shared in winter 2020.

- Prevention Research Centers (PRCs)

For the FY 2019-2024 funding cycle, eight of the 25 Prevention Research Centers (PRCs) supported by the CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) are working on projects that are specific to rural communities. This research will explore the implementation, evaluation, and translation of interventions and models to improve health in rural communities. Findings will be used to support evidence-based rural health research, facilitate the scaling up of interventions or adaption to local levels, and may have implications for reducing risk around these topics in other communities.

The PRCs are a network of 25 research centers that are university-based and investigate how people and their communities can avoid or counter the risks for the leading causes of illness or injury. Through rigorous research, each center conducts at least one main project with an underserved population that has high rates of disease. Additional

information about the work of the eight rural-focused PRCs is at:  
<https://www.cdc.gov/prc/index.htm>.

#### NIH/National Institute of Nursing Research (NINR)

- Strategies to Improve Health Outcomes and to Reduce Disparities in Rural Populations

NIH/NINR will provide \$2.5 million in FY 2020 with a total investment of approximately \$8 million across a four year project period to support research to promote a greater understanding of the challenges faced by rural population groups, for the development (or adoption/adaptation) of evidence-based interventions that can reduce health risks faced by rural Americans. Prevention strategies may address and measure reductions in risk factors and enhancement of protective factors, while treatment approaches would seek to measure and address amelioration of health in individuals living with existing conditions. To accomplish these goals, the research community will be encouraged to use a variety of methodological approaches that can enhance access to and acceptability of interventions in rural settings, such as telehealth and community-based prevention research, where appropriate.

#### HHS Office of Inspector General (OIG)

- Opioids in Medicaid: Review of Extreme Use and Overprescribing in the Appalachian Region

In FY 2021, OIG plans to release a report describing extreme opioid use and overprescribing specific to Medicaid beneficiaries living in the Appalachian region. More than 40 percent<sup>99</sup> of the Appalachian population resides in rural communities. This review will identify beneficiaries who received extreme amounts of opioids through Medicaid, beneficiaries who appear to be doctor or pharmacy shopping, and prescribers associated with these beneficiaries. In 2017, the opioid overdose death rate was 72 percent higher in Appalachian counties than non-Appalachian areas. These issues are of particular concern for Medicaid beneficiaries, who are more likely to have chronic conditions and comorbidities that require pain relief, especially those beneficiaries who qualify through a disability. More information about this report is at:  
<https://oig.hhs.gov/reports-and-publications/workplan/summary/wp-summary-0000392.asp>.

#### NIH

- Native American Research Centers for Health (NARCH)

In FY 2020, NIH issued a funding opportunity announcement seeking applications to support research projects through the NARCH. This announcement will support biomedical research and career enhancement opportunities to meet health needs prioritized by the American Indian/Alaska Native (AI/AN) communities. More information about this report is at: <https://grants.nih.gov/grants/guide/pa-files/PA-20-125.html>.

## NIH/National Cancer Institute (NCI)

- Administrative Supplements for Geographically Underserved Areas to NCI R01 grantees

In FY 2020, NCI is targeting \$2 million for 10 administrative supplements to R01 grantees in geographically underserved rural areas with deep and/or persistent poverty. Through this supplement, additional consideration is being given to applicants who focus on populations in frontier and remote areas (FAR) and/or HPSAs with deep and persistent poverty.

This supplemental opportunity is a follow-up to the rural-focused cancer control supplements that Division of Cancer Control and Population Sciences (DCCPS) awarded in 2018 and 2019 to P30 Cancer Center Support Grants (CCGSs), which focused on developing research partnerships with rural communities and clinics for cancer control. Despite advances in cancer prevention, diagnosis, treatment, and survival, disparities in cancer outcomes continue to persist with increased mortality among people living in poverty. Poverty, and especially deep poverty, has been associated with substantial cancer risk due to increased exposure to carcinogens, low educational attainment, lack of adequate housing, access to food and food security, and lack of access to care. All these factors result in delays in cancer diagnosis, treatment, and lower rates of survival. In particular, people living in poverty have high rates of cancers caused by occupational, recreational, or lifestyle exposures (e.g., colorectal, laryngeal, liver, lung) and by human papillomavirus infection (e.g., anal, cervical, oral).<sup>100,101,102,103</sup> These issues are further exacerbated in areas where there are no health facilities as designated as HPSAs by HRSA. These areas and populations were not previously as a significant component of cancer control research.

- Social and Behavioral Intervention Research to Address Modifiable Risk Factors for Cancer in Rural Populations

In FY 2021, NIH/NCI will invest \$3 million to support research focused on cancer prevention and addressing one or more of the social and behavioral risk factors contributing to cancer disparities in rural populations. It will also focus on the social determinants of health, cultural factors, and health care and technology access barriers that may contribute to rural cancer disparities. NIH/NCI anticipates funding approximately five awards. The investment will address the fact that, to date, there have been few intervention studies to address social and behavioral risk factors for cancer specifically in rural populations, and very little has been published on addressing non-geographic aspects of rurality that may contribute variance to cancer-related outcomes in rural populations.

## Engaging Stakeholders

### ACL

- Independent Living Supports for Agricultural Workers with Disabilities

ACL, in coordination with USDA and ED, will build an ongoing partnership between Centers for Independent Living (CILs) and AgrAbility. AgrAbility enhances the quality of life for farmers, ranchers, and other agricultural workers with disabilities. USDA funds AgrAbility, and ED's Vocational Rehabilitation grantees will play a key role in this partnership. In addition to ACL's CIL grantees, ACL will also engage the Association of Programs for Rural Independent Living (APRIL) and State Independent Living Councils (SILCs) grantees. This project aligns with ACL's priority to expand employment opportunities for individuals with disabilities.

### CMS

- Improving Access to Maternal Health Services in Rural Communities

- *Request for Information*

On February 12, 2020, CMS Administrator Seema Verma announced an RFI seeking public comments regarding rural maternal and infant health care. Through the CMS Office of Minority Health, CMS is seeking information related to opportunities to improve access, quality, and outcomes before, during, and after pregnancy, and to develop and refine programs and policies that ensure all rural women and their babies have access to high-quality health care that results in optimal physical and behavioral health.

Responses to this RFI will be used to inform future discussions among stakeholders and future works by CMS toward the development and refinement of programs and policies that ensure rural families have access to high-quality health care that results in improved health outcomes. More information about this initiative is at:

<https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/rural-health/rural-maternal-health>.

- *Rural Maternal Health Strategy*

In 2020, CMS is convening a workgroup of rural and maternal health experts to draft considerations for HHS to help rural hospitals without OB services and rural EMS be prepared for emergency deliveries and other related maternal care.

## Strategy 4: Increase Rural Access to Care

### Grants

#### ACF

- Expand Regional Partnership Grants

The President's FY 2021 Budget proposes a funding increase to expand the Regional Partnership Grants by \$40 million per year to serve more communities, especially rural areas, affected by SUD including opioid misuse and provide flexibility for a shorter planning period. These grants increase the well-being of, improve permanency for, and enhance the safety of children who are in, or at risk of, an out-of-home placement as a result of a parent's or caregiver's opioid or other substance abuse. Results from the first round of grants indicate that the majority of participating children at risk of removal remained in their parent's custody, most children in out-of-home placements achieved timely reunifications with their parent(s), and after returning home, very few re-entered foster care.

- Increase Childcare Services for Underserved Populations

The President's FY 2021 Budget proposes a one-time \$1 billion fund for competitive grants to states increasing childcare services for underserved populations and stimulating employer investment in childcare. Many parents struggle to find affordable quality childcare, especially in rural areas and during non-traditional work hours.

#### HRSA

- Innovative Programs in Rural Health Workforce

To address ongoing shortages of health care professionals in rural communities, HRSA is providing approximately \$178 million in FY 2020 to enhance and support the rural health professions workforce through innovative training grant programs as well as programs that incentivize clinicians to work in rural and underserved communities. To date, \$56.65 million of that funding is dedicated to rural communities. Of the approximately 440 grants and individual loan repayment awards that HRSA intends to make through the programs listed below, about 370 awards will be rural-focused. These programs include:

- *Teaching Health Center Graduate Medical Education Program* (\$120 million with \$13.4 specifically for rural communities)
- *Primary Care Training and Enhancement - Residency Training in Primary Care Program* (\$10 million of which a portion will include rural projects)
- *National Health Service Corps Rural Community Loan Repayment Program* (\$35 million)
- *Rural Residency Planning and Development Program* (\$8.25 million)
- *Advanced Nursing Education Nurse Practitioner Residency Integration Program* (\$5 million of which a portion will include rural projects)

HRSA has identified numerous effective strategies for incentivizing providers to choose careers in primary care and to practice in rural areas, including positive training experiences in rural and underserved communities and rotations in community-based practice locations. Building on these strategies and on past funding opportunities, HRSA has been reviewing its current funding opportunities to identify how best to recruit individuals from underserved areas and encourage rural training and to better leverage those programs to meet rural needs.

## SAMHSA

- Rural Emergency Medical Services Training Grant

Beginning in FY 2020, SAMHSA is investing \$5 million for a one-year effort to recruit and train EMS personnel in rural areas. SAMHSA recognizes the great need for emergency services in rural areas and the critical role EMS personnel serve across the country.

## Policy and Regulatory Efforts

### CMS

- Expanding Access to Medicare Advantage in Rural Areas

The President's FY 2021 Budget includes a legislative proposal to allow MA plans to enter into reinsurance arrangements recognized as acceptable by the National Association of Insurance Commissioners and state insurance departments. Currently, MA plans can only enter into reinsurance arrangements under limited circumstances, especially when compared to common insurance practices. Consequently, plans may not be able to enter into certain common reinsurance arrangements, which may inhibit their ability to grow, particularly in areas with smaller risk pools, such as rural areas. In a final rule published on June 2, 2020 (85 FR 33796), CMS adopted regulation to formally establish, within the existing statutory framework, reinsurance standards for the MA program.

- Reducing Regulatory Burden

The President's FY 2021 Budget includes a legislative proposal to eliminate for most Durable Medical Equipment, Prosthetics/Orthotics, and Supplies (DMEPOS) suppliers the requirement that suppliers have documentation of a beneficiary's face-to-face encounter with a physician or a non-physician practitioner as a condition for Medicare payment for certain DMEPOS orders. The goal is to allow CMS flexibility in the enforcement of this requirement, which can be overly burdensome for providers and suppliers.

The President's FY 2021 Budget also includes a legislative proposal to remove the current payment requirement that in order to receive payment under Medicare Part A for inpatient CAH services, a physician must certify that a patient at a CAH is reasonably expected to be discharged or transferred to a hospital within 96 hours of admission to the CAH. CAHs are still eligible for Medicare payment if an individual patient's stay

exceeds 96 hours; however, CAHs must maintain an annual average length of stay of 96 hours or less, which is a statutory requirement and a Medicare Condition of Participation.

## HRSA

- Expanding Tax-Exempt Status to Nurse Corps Scholarship Program, Native Hawaiian Health Scholarship Program, and the Nurse Corps Loan Repayment Program

The President's FY 2021 Budget includes a legislative proposal to extend tax-exempt status to payments under the Nurse Corps Scholarship Program, the Native Hawaiian Health Scholarship Program, and the Nurse Corps Loan Repayment Program. This proposal would align the tax status of the Nurse Corps and the Native Hawaiian Health Scholarship Program with the National Health Service Corps. The exemption would also allow HRSA to maximize the number of awards made with appropriated funds rather than using appropriated funds in the employer share of the Federal Insurance Contributions Act (FICA). This exemption would significantly ease the burden on health professions students and clinicians participating in these programs who are currently responsible for income tax and the employee share of FICA.

## Research and Analysis

### HRSA

- Addressing Rural Scope of Practice Concerns

HRSA is developing a policy brief examining the challenges state-based licensure restrictions create for rural residents by exacerbating existing workforce shortages by failing to let health care clinicians practice to the full extent of their training. This policy brief is highlighting some of the important steps HHS has taken within its authority to bring attention to this issue.

- Enhance Rural-Urban Workforce Projection Efforts

The National Center for Health Workforce Analysis (NCHWA) informs public and private-sector decision-making on the U.S. health workforce by expanding and improving health workforce data and its dissemination to the public, and by improving and updating projections of supply of and demand for health workers. The Health Workforce Simulation Model (HWSM) is an integrated microsimulation model that estimates the future demand for and supply of health care workers by occupation and across employment settings. The model is designed to produce national and state-level estimates and to quantify the effects of policy options and trends affecting care use and delivery. The NCHWA has developed a new methodology to produce estimates in urban, rural, and suburban geographies which is in clearance internally at HHS.

## Engaging Stakeholders

### ACF

- Outreach and Promotional Services

ACF's Administration for Native Americans (ANA) will provide outreach and promotional services at conferences related to Native American traditional farming and healthy food production. This activity will increase the knowledge of health benefits of traditional and organic foods among Native populations and reduce the rate of obesity and obesity-linked diseases that disproportionately affect Native American communities.

- Increasing Access to Healthy Foods for Native Americans

ACF currently funds a limited number of traditional farming projects for Native Americans through its Social and Economic Development Strategies (SEDS) grant. Approximately half of SEDS recipients are located in rural areas. ACF is exploring strategies to award bonus points or create a separate funding solicitation under its SEDS grants to expand these programs. This could increase the knowledge of health benefits of Indigenous/organic foods among Native populations and reduce the rate of obesity and obesity-linked diseases that disproportionately affect Native American communities. More information about the SEDS program is at: <https://www.acf.hhs.gov/ana/programs/seds>.

- Targeting Native American Food Sovereignty and Healthy Food Options

For FY 2021, ACF will consider creating a special funding competition of up to \$1 million targeting Native American traditional farming, subsistence lifestyle, food security, food sovereignty, and projects that provide access to healthy food options for Native American communities. Given the focus on tribal populations, it is expected that a significant portion of the funding and impact will be in rural areas.



## Section V. Highlighting Recent Rural Efforts

This section highlights some of the key recent rural-focused investments and policies in HHS. It includes detailed information on grant awards as well as descriptions of other activities focused on efforts as varied as regulatory changes, technical assistance activities, and stakeholder engagement.

Appendix B includes a broader list of additional recent programs, initiatives, stakeholder engagement, research, analysis, and technical assistance. This list is not exhaustive and reflects recent activities that addressed rural health and human service issues and highlights past successful rural-related projects from key agencies and offices across HHS. This includes some programs with rural as a potential focus area.

### **Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities**

#### Grants

##### HRSA

- Rural Maternity and Obstetrics Management Strategies (RMOMS)

In FY 2019, FORHP and the Maternal and Child Health Bureau (MCHB) awarded \$1.8 million to three grantees in the RMOMS program. The purpose of this pilot program is to support new approaches to ensure access to and continuity of maternal OB care in rural communities. The program is part of a suite of maternal health investments made by HRSA to support local and state-level efforts to improve maternal health nationwide. Awardees in New Mexico, Missouri, and Texas are developing and testing models that improve access to and continuity of maternal OB care in rural communities. RMOMS is unique in that its network requirements detail the involvement of specific stakeholders, including rural hospitals, health centers, state Medicaid offices, and Healthy Start and Home Visiting programs, with the intention of developing sustainable strategies at a regional level. The networks are implementing strategies that focus on: 1) rural hospital OB service aggregation; 2) a network approach to coordinating a continuum of care; 3) leveraging of telehealth and specialty care; and 4) approaches to financial sustainability. An expansion of this effort from a pilot to a larger program was included in the President's FY 2021 Budget proposal and is described in Section IV of this document.

#### Contracts

##### IHS

- Community Health Aide Program (CHAP)

In FY 2019, IHS provided \$2 million for CHAP. CHAP has become a model for efficient and high-quality health care delivery in rural Alaska providing approximately 300,000 patient encounters per year and responding to emergencies 24 hours a day, seven days a week. With the rising demand for comprehensive quality health care, tribal

communities are increasingly looking for innovative approaches to health service delivery. Specialized training for health aides in medical, dental, or behavioral health and federal certification programs create opportunities for health aides to focus their training and practice on particular health issues and delivery strategies.

## Policy and Regulatory Efforts

### CMS

- Updating the Hospital Wage Index

In FY 2020, CMS made changes to the Inpatient Hospital Medicare wage index. The wage index is an adjustment to inpatient hospital payment rates accounting for local differences in wages that hospitals face in their respective labor markets. It is intended to measure differences in hospital wage levels across geographic regions. It is also updated annually based on wage data reported by hospitals. Hospitals located in areas with wages below the national average tend to receive a lower Medicare payment rate than hospitals in areas with above-average wages.

A common concern from the public was that the current wage index system worsens disparities between hospitals in high-wage and low-wage areas, the latter of which tend to be rural. The revisions to the wage index help to address these disparities by increasing the wage index for certain low-wage index hospitals, which include many rural hospitals. This policy may help to improve access to care by supporting rural hospitals' capacity to attract and retain a strong workforce.

In 2019, CMS published the FY 2020 IPPS final rule (84 FR 42044), which included changes to the wage index to help address wage index disparities between high-wage and low-wage hospitals. Approximately 60 percent of hospitals that received increased wage index payments were rural hospitals.

- Testing Innovative Payment Models Focused on Rural Health

- *The Vermont All-Payer Accountable Care Organization (ACO) Model*

The Vermont All-Payer ACO Model is an initiative to facilitate aligned ACO programs across multiple payers in the state. As a predominately rural state, eight of the 14 hospitals in Vermont are CAHs, of which seven are participating in the model. Each ACO program (Medicare, Medicaid, and Commercial) has payer-specific financial benchmarks and settlement calculations, but the ACO program design—including quality measures, risk arrangement, payment mechanisms, and beneficiary alignment methodology—is closely aligned across payers. Alignment around ACO program components is a critical aspect of the model test, in that it is hypothesized to reduce provider burden and create a rational business strategy for providers located in the state to engage in delivery system transformation across their books of business. The Vermont All-Payer ACO Model's objectives are to improve health outcomes and reduce health care expenditures by: 1) scaling aligned ACO programs throughout Vermont across payers, providers, and residents; and 2) establishing state and ACO-

level goals and accountability for state-identified health outcomes (SUD, suicides, chronic conditions, and access to care), facilitating collaboration between the care delivery system and public health systems. The Vermont All-Payer ACO Model is currently in Performance Year 3, with the model set to end in December 2022.

- *The Pennsylvania Rural Health Model (PARHM)*

PARHM is a state-led, all-payer model for rural hospitals. The model, which is open to both acute care hospitals and CAHs, is testing the effect of deliberate care delivery transformation of rural hospitals and population-based payments (in the form of global budgets) on quality and cost of care for rural Pennsylvanians. It also implements all-payer, prospective global budgets for inpatient and outpatient services for these hospitals. The model's goals focus on 1) addressing SUD; 2) increasing access to primary and specialty care; and 3) reducing chronic condition disparities in rural areas. The model is currently in Performance Year 2, and the performance period of the model ends in 2024.

## Research and Analysis

### HRSA

- Rural Health Research Center (RHRC) Program

In FY 2019, FORHP provided over \$5.6 million to support policy-relevant health services research through the RHRC program. This initiative funded eight RHRCs, including one focused entirely on telehealth research. The purpose of the RHRC program is to assist health care providers and policy-makers at the federal, state, and local levels in better understanding the challenges faced by rural communities and in designing policies to improve health care access and population health. In FY 2019, the RHRC program released 56 publications in peer-reviewed journals and on the Rural Health Research Gateway. More information about this program is at:

<http://www.ruralhealthresearch.org/>.

### HHS Collaborations

- HIV, HCV, and Related Comorbidities in Rural Communities Affected by Opioid Injection Drug Epidemics in the United States: Building Systems for Prevention, Treatment, and Control

Beginning in FY 2018, NIH/National Institute on Drug Abuse, CDC's National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, Appalachian Regional Commission, and SAMHSA have collaborated to fund, monitor, and provide programmatic guidance to cooperative agreements supported under the funding opportunity announcement entitled "HIV, HCV and Related Comorbidities in Rural Communities Affected by Opioid Injection Drug Epidemics in the United States: Building Systems for Prevention, Treatment, and Control."

This cooperative agreement supports two-stage, multi-method research projects that are intended to inform community response and promote comprehensive, integrated approaches to prevent HIV and hepatitis C virus (HCV) infection, along with associated comorbidities such as hepatitis B virus (HBV) infection and sexually transmitted diseases (STDs), among people who inject drugs (PWID) in rural U.S. communities. Opioid injection and its consequences (e.g., HIV, HCV, HBV, STDs, and overdose) are the primary foci here. It is anticipated that these projects will yield evidence of the effectiveness of community response models and best practices in responding to opioid injection epidemics that can be implemented by public health systems in similar rural communities in the United States.

### Stakeholder Engagement

#### ACF

- Victim Assistance

In FY 2018, the ACF's Trafficking Victim Assistance Program (TVAP) was tasked with building local capacity of service providers to serve victims of human trafficking and establish a network of sub-recipients. TVAP has built capacity in rural areas to ensure representation of rural-based service providers across the United States so that victims of trafficking may be referred to services regardless of where they are located. Grantees served at least 62 clients who experienced labor trafficking in the agriculture sector across the United States. Grantees provided clients with safe housing, stable employment, information on immigration laws and labor rights, medical services to treat ailments such as chronic headaches and abdominal pain, and mental health services to treat anxiety and depression.

The ACF's Look Beneath the Surface Regional Anti-Trafficking Program (LBS) grantees conduct outreach among at-risk populations, including farmworkers. Grantees visited housing sites to provide information on trafficking indicators and the National Human Trafficking Hotline number. In FY 2018, LBS grantees identified 62 adults who experienced labor trafficking within the agriculture/field labor industry. LBS grantees have also partnered with migrant health programs to provide training on trafficking to medical students and professionals serving farmworkers in an effort to increase the identification of victims.

Additionally, LBS Program grantees are expected to build capacity to respond to human trafficking through coalition building. In Ohio, for example, the LBS Program facilitated the expansion of the state and local human task forces to include representation from almost every county in the state, including rural communities. In the current cohort, at least 50 percent of LBS grantees focus primarily on outreach in rural communities.

## FDA

- FDA Rural Health Symposium

The FDA Office of Minority Health and Health Equity in collaboration with FDA Centers and Offices hosted an inaugural Rural Health Symposium on October 26, 2017. The symposium provided an opportunity for FDA and stakeholders in rural and tribal communities to discuss ways to work together to address the unique health challenges these communities face including federal agencies' perspectives on advancing telemedicine, research and interventions in the area of rural tobacco use, and addressing the opioid crisis in rural and tribal communities. Information about the symposium is at: <https://www.fda.gov/consumers/minority-health-and-health-equity/fda-rural-health-symposium>.

## HRSA

- Guide to Rural Health Care Collaboration and Coordination

In August 2019, HRSA published a “Guide to Rural Health Care Collaboration and Coordination,” which describes how rural hospitals, community health centers, local public health departments, and other rural stakeholders can work together to identify the health needs in their communities and create partnerships to address those needs. This guide contains case studies about two communities where rural providers created networks and partnerships to improve the efficiency of care, optimize resources, and improve the lives of their residents. It also includes resources and access to up-to-date information on relevant policies and regulations. More information about this guide is at: <https://www.hrsa.gov/sites/default/files/hrsa/ruralhealth/resources/hrsa-rural-collaboration-guide.pdf>. A recording of the webinar that announced this guide is at: [https://www.youtube.com/watch?v=-8itFwKrrig&feature=emb\\_title](https://www.youtube.com/watch?v=-8itFwKrrig&feature=emb_title).

## NIH/National Institute of Child Health and Human Development (NICHD)

- Ad-Vance Kids: A Community-Engaged Approach to Inform a Rural, Multi-level Community-Based Child Obesity Prevention Intervention

In a southern rural county with high (21 percent) childhood obesity levels, a university-based research team will identify core cultural values, needs, and goals around childhood obesity prevention, engaging with partners from the rural community to conceptualize the design, implementation strategies, and evaluation plan for a rural, multi-level, community-based intervention to prevent unhealthy weight gain in children aged two through five. The goal is to set the foundation for a sustainable, community-academic partnership to enable community partners to begin integrating key health messages into ongoing health promotion/education programs for parents and families in the community.

- Community Based Participatory Research Initiative in Reducing Infant Mortality in American Indian Communities

The goal of this study is to engage American Indian (AI) communities in the design and implementation of an intervention to reduce these communities' significantly elevated risk for Sudden Infant Death Syndrome (SIDS) and other related infant deaths due to unsafe sleep environments. Leveraging relationships with AI communities and partnerships with local clinics, hospitals, and community service agencies established in prior SIDS research projects, the researchers will use a community-based participatory research approach. Specifically, they will assess to which AI family and community norms, attitudes, and personal beliefs about infant sleep environments and science-based safe sleep messages may be in conflict. Using community-derived data, the researchers will develop a culturally appropriate AI safe sleep curriculum about safe infant sleep environments and evaluate its efficacy with Northern Plains AI families.

- Autism Adaptive Community-based Treatment to Improve Outcomes using Navigators (ACTION) Network

Diagnosis of autism spectrum disorder (ASD) can be made in children as young as 18 months to 24 months of age, yet the median age of ASD diagnosis in the United States is four years to five years of age and children in rural, as well as low-income and minority families are diagnosed up to 1.5 months later. Later diagnosis puts children at risk of losing the window of opportunity to improve ASD outcomes with early intervention. To reduce such delay for rural and other at-risk children, researchers will leverage the existing Autism ACTION network to empower families of very young children. Steps will include engaging families to access resources and support, when they first learn their child has signs of ASD, by using an evidence-based intervention, and coaching families to embed intervention-based strategies for toddlers with ASD in everyday activities. Families will be recruited by screening in community-based primary care and early intervention systems in diverse regions in Florida and Massachusetts. A second phase of the project will assess the possible implementation of this program in two new service systems in California – the Kaiser Permanente Healthcare System and the National Black Church Initiative.

## **Strategy 2: Leverage Technology and Innovation**

### Grants

#### HRSA

- Support for Telehealth

In FY 2019, FORHP invested \$12.6 million to expand access to telehealth services in rural communities through 38 awards across three grant programs.

- *TNGP*: The TNGP funds projects that demonstrate the use of telehealth networks to improve health care services for medically underserved populations in rural and frontier communities. The primary objective of the program is to help communities build the human, technical, and financial capacity to develop sustainable telehealth programs and networks. The current cohort of grantees is connecting over 200

- schools in 21 networks across 22 states and has a clinical focus on asthma, diabetes, oral health, and mental health. As of FY 2018, patients in the 21 networks funded by the program have reported an annual saving of nearly 3.1 million miles traveled between health care facilities by having primary and specialty care through telehealth technologies.
- *EB THNP*: The two-fold purpose of the EB THNP is to use telehealth networks to increase access to behavioral health care services in rural and frontier communities and to conduct evaluations of those efforts to establish an evidence base for assessing the effectiveness of tele-behavioral health care for patients, providers, and payers.
  - *Substance Abuse Treatment Telehealth Network Grant Program (SAT TNGP)*: The purpose of the SAT TNGP is to demonstrate how telehealth programs and networks can improve access to health care services, particularly with SUD services, in rural, frontier, and underserved communities.
  - The Pediatric Mental Health Care Access (PMHCA) Program

In FY 2019, HRSA made 21 awards for a total investment of \$9.2 million in the PMHCA program. Nineteen of the 21 PMHCA awardees serve states where there are entire counties or specific census tracts within metropolitan counties that are rural. The PMHCA program promotes behavioral health integration into pediatric primary care using telehealth. New and expanded statewide or regional networks of pediatric mental health teams provide tele-consultation, training, technical assistance, and care coordination for pediatric PCPs to diagnose, treat, and refer children with behavioral health conditions, especially those living in rural and other underserved areas. PMHCA awardees will provide baseline and annual data on the following outcome measure: number of children and adolescents living in rural and underserved counties served by pediatric PCPs who contacted the pediatric mental health team (including by telehealth).

### Policy and Regulatory Efforts

#### FDA

- Medical Technology

In recent years, the FDA granted marketing authorization for a series of innovative medical devices to increase overall patient access to health care services in recent years. This policy can be particularly beneficial to patients in rural communities, who often lack access to local specialists or face significant travel burden.

- *IDx-DR*: This device detects high sugar level in diabetic patients. It is the first medical equipment to use artificial intelligence (AI) to remotely detect greater than a mild level of diabetic retinopathy. Approval was granted on April 11, 2018. More information about this technology is at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/denovo.cfm?ID=DEN180001>.

- *Clearmate*: This device is intended for use in an emergency room setting to help treat patients with carbon monoxide poisoning. It has particular utility in situations where hospitals are remotely located. Approval was granted on April 14, 2019. More information about this technology is at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/denovo.cfm?ID=DEN170044>.
- *Viz.AI Contact*: This software analyzes images and notifies providers of a potential stroke in their patients. It may benefit smaller and rural facilities that do not have radiologists or specialists available at all hours. Approval was granted on February 13, 2019. More information about this technology is at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/denovo.cfm?ID=DEN170073>.
- *Nucleus Cochlear Implant System*: This system includes a remote programming feature to program cochlear implants, an implanted electronic hearing device, through a telemedicine platform. This feature is indicated for patients who have had six months of experience with their cochlear implant sound processor. Having a qualified health care provider program the device via telemedicine from a remote location can greatly reduce the burden to patients and their families, especially those who must travel long distances or need frequent adjustment. Approval was granted on November 17, 2017. More information about this technology is at: <https://www.fda.gov/news-events/press-announcements/fda-approves-first-telehealth-option-program-cochlear-implants-remotely>.
- *Caption Guidance Software*: This device is used to enable medical professionals who may not be experts in ultrasonography, such as a registered nurse in a family care clinic or others, to use this tool. It demonstrates the potential for artificial intelligence and machine learning technologies to increase access to safe and effective cardiac diagnostics that can be life saving for patients. Approval was granted on February 7, 2020. More information about this technology is at: <https://www.fda.gov/news-events/press-announcements/fda-authorizes-marketing-first-cardiac-ultrasound-software-uses-artificial-intelligence-guide-user>.

### **Strategy 3: Focus on Preventing Disease and Mortality**

#### Grants

#### ACF

- Social and Economic Development Strategies (SEDS)

The Administration for Native Americans' SEDS program promotes social and economic self-sufficiency in communities through SEDS grants. In FY 2019, ACF awarded approximately \$19.4 million (both new and continuous awards) across 72 grantees; approximately 44 percent of the awardees are in rural areas. This program is noteworthy because it connects tribal youths with the older generation in communities through



traditional farming and knowledge transfer. The products (organic foods) from these farm projects also help to reduce the rate of obesity among Native children and obesity-linked diseases that disproportionately affect the Native American community. In addition, these projects lead to greater economic independence for some communities. More information about the SEDS program is at:

<https://www.acf.hhs.gov/ana/programs/seds>. A list of current grantees is at:  
<https://www.acf.hhs.gov/ana/current-grantees>.

## CDC

- Rural Response to Opioid Epidemic

In FY 2019, CDC provided \$1.5 million in a joint effort with the Bureau of Justice Assistance and the State Justice Institute to fund 21 rural communities to reduce the morbidity and mortality associated with opioid overdoses among individuals who come in contact with law enforcement or are involved in the criminal justice system in high-risk rural communities and regions. Awardees will collaborate with partners, enhance surveillance and data infrastructures, and increase evidence-based interventions and prevention activities. Awardees will also implement (or expand) practices for OUD treatments, as well as expand peer recovery and support services.

## HRSA

- Health Improvement Special Project (HISP)

In FY 2019, FORHP allocated \$2,387,352 specifically for 12 HISP awards within the Rural Health Care Outreach Grant Program. FORHP developed HISP as a special emphasis track within the Rural Health Care Outreach Grant Program in response to findings by CDC on rural disparities in cardiovascular disease (CVD) morbidity and mortality. The HISP track specifically aims to improve the health outcomes of people in rural communities with CVD. Grantees are required to utilize the CDC Heart Age Calculator to assess cardiovascular risk. Qualitative data reveal that the use of predicted heart age might be an effective way to communicate CVD risk. This information can be utilized to identify geographic regions, populations, and individuals most in need of CVD risk factor improvement. Such work can be a powerful tool in cardiovascular health behavior change and assessment.

- Rural Communities Opioid Response Program (RCORP)

FORHP invested \$135 million in 216 organizations through the Rural Communities Opioid Response Program (RCORP) in FY 2019. RCORP is a multi-year opioid-focused initiative aimed at reducing the morbidity and mortality of SUD, including OUD, in rural communities at the highest risk for SUD. RCORP funds multi-sector consortia to enhance their ability to implement and sustain SUD/ODU prevention, treatment, and recovery services in underserved rural areas. Awards included: 120 RCORP-Planning one-year awards at \$200,000 each, 80 RCORP-Implementation three-year awards at \$1 million each; 12 RCORP-MAT Expansion three-year awards up to \$725,000 each; \$20

million for three Rural Centers of Excellence on SUD; and \$3 million to evaluate the impact of RCORP initiatives. There is a continuation of the RCORP initiative into FY 2020 with another \$110 million invested through Implementation, Planning, and a new NAS program. Since FY 2018, FORHP has invested \$157 million, reaching 1,117 rural counties across 47 states through RCORP. More information about RCORP is at: <https://www.hrsa.gov/rural-health/rcorp>.

## IHS

- Special Diabetes Program for Indians (SDPI)

IHS invests \$150 million annually to support 301 Indian Health Programs in SDPI. The majority of the Indian Health Programs are located in rural communities. IHS coordinates SDPI with guidance from the Tribal Leaders Diabetes Committee and provides funds for diabetes treatment and prevention to IHS, Tribal, and Urban Indian health programs. Congress established the SDPI grant programs in 1997 in response to the diabetes epidemic among American Indians and Alaska Natives.

## Research and Analysis

### AHRQ

- Analyzing Rural Access to Care

AHRQ released several publications related to rural health, including: “Rural Residents with Mental Health Needs Have Fewer Care Visits than Urban Counterparts,” in the journal *Health Affairs* in 2019, and “Rural-Urban Differences in Access to Primary Care: Beyond the Usual Source of Care Provider,” in the *American Journal of Preventive Medicine*. AHRQ also released the Medicare Expenditure Panel Survey Stat Brief, “Insurance and Access to Care in Urban and Rural Areas” in May 2018.

- Overcoming Barriers to Expanding Medication Assisted Treatment (MAT) through Primary Care in Rural Communities

AHRQ awarded four, three-year competitive research grants to support rural primary care practices in Colorado, North Carolina, Oklahoma, and Pennsylvania in delivering MAT. The goals of the initiative were to learn more about models and effective strategies to initiate and sustain MAT for OUD in rural primary care practices, and to develop resources and training materials for physicians and rural primary care practices that will facilitate and sustain MAT. A primary finding of this research is that simply increasing the number of certified MAT clinicians is not enough to substantially increase access in rural communities. Clinicians must be provided with significant additional support to implement MAT into their primary care practices.

## CDC

- CDC Morbidity and Mortality Weekly Report (MMWR) Rural Health Series

CDC published a 13-issue rural health series of the MMWR in 2017. Topics addressed in the MMWR rural health series included leading causes of death, mental and behavioral health, suicide, cancer, racial and ethnic disparities, and environmental factors, among others. The reports highlighted these health disparities between rural and urban populations, and also provided discussion on future directions and policy considerations to address the disparities and improve outcomes for rural populations. Throughout the year, CDC collaborated with FORHP to disseminate the findings of the MMWR publications through webinars, conference presentations, and other forums. This significant focus on rural health disparities through CDC's publications brought visibility and awareness of the health issues facing rural populations to a much broader national and international audience.

Since the series in 2017, CDC has continued to publish rural-focused MMWRs, releasing approximately three to four rural-focused reports per year, and will continue to do so in the future. The full MMWR rural health series is at: [https://www.cdc.gov/mmwr/rural\\_health\\_series.html](https://www.cdc.gov/mmwr/rural_health_series.html).

- National Center for Health Statistics (NCHS) – Data Briefs Focused on Rural Health Disparities

NCHS within the CDC publishes regular data briefs on current public health topics. Each report takes a complex data subject and summarizes it in text and graphics that provide readers with easily comprehensible information in a compact publication (PDF) and webpage. NCHS increased the number of rural data briefs published over the past three years with 11 currently released on the NCHS website. A complete list of all NCHS Data Briefs is at: <https://www.cdc.gov/nchs/products/databriefs.htm>. To see those that specifically address rural health, search “rural.” Recent examples of data briefs that have focused on rural disparities include the following:

- Infant Mortality Rates in Rural and Urban Areas in the United States, 2014 (NCHS Data Brief No. 285, September 2017; <https://www.cdc.gov/nchs/products/databriefs/db285.htm>)
- Suicide Mortality in the United States, 1999-2017 (NCHS Data Brief No. 330, November 2018; <https://www.cdc.gov/nchs/products/databriefs/db330.htm>)
- Urban-Rural Differences in Drug Overdose Death Rates, by Sex, Age, and Type of Drugs Involved, 2017 (NCHS Data Brief No. 345, August 2019; <https://www.cdc.gov/nchs/products/databriefs/db345.htm>)

In addition to the Data Briefs, NCHS has collaborated with FORHP on several webinars to further highlight and disseminate the findings. These findings have played a major

role in increasing awareness around the health status of rural residents. NCHS will continue to publish Data Briefs focused on rural disparities in the future.

#### HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE)

- Challenges and Promising Strategies in Addressing Substance Use Disorders among Child Welfare System Clients in Rural Communities

This study used qualitative research methods to describe the challenges involved in serving rural child welfare-involved families with SUD issues and strategies for providing effective services. The first publication from this research focused on challenges faced by rural communities. A second publication that focuses on service strategies is anticipated for release in 2020. Information about this study is at: <https://aspe.hhs.gov/pdf-report/challenges-providing-substance-use-disorder-treatment-child-welfare-clients-rural-communities>.

#### HHS OIG

- Geographic Disparities Affect Access to Buprenorphine Services for Opioid Use Disorder

An OIG study, released January 2020, found that 72 percent of counties with low-to-no patient capacity for buprenorphine services for OUD were located in rural areas. Although the number of providers authorized to prescribe buprenorphine for MAT has increased significantly, access to these providers is not distributed evenly across the nation. Among 1,119 counties identified by OIG as having the greatest need for buprenorphine services, 56 percent were likely to have had inadequate capacity to treat patients with buprenorphine in an office setting. OIG complemented the study with interactive maps that provide the underlying county-level data. More information about the study is at: <https://oig.hhs.gov/oei/reports/oei-12-17-00240.asp>. The interactive maps are at: <https://oig.hhs.gov/oei/maps/waivered-providers/index.html>.

#### NIH/ NCI

- Rural Focused Cancer Control Supplements

NIH/NCI provided two rounds of rural-focused cancer control supplements to the 27 NCI-designed Cancer Centers in 2018 and 2019 for a total of \$8.8 million in response to research findings that while the incidence rate of cancer is lower in rural areas, mortality from cancer is higher. The purpose of the supplements was to develop research partnerships with rural communities and clinics for cancer control, as well as to develop and advance research capacity and collaborations with rural clinics to conduct research in cancer prevention and control. The purpose of the supplements was also to increase preliminary data collection and improve data integration to inform and enhance research, and to develop implementation programs in these rural areas. More information about this initiative is at: <https://cancercontrol.cancer.gov/research-emphasis/rural.html>.

- Improving the Reach and Quality of Cancer Care in Rural Populations

NIH/NCI allocated \$2.6 million in FY 2019 for grantees to develop interventions that address quality of care related to cancer diagnosis, treatment, and survivorship of rural cancer patients. The goal of this ongoing effort is to reduce the burden of cancer and improve the quality of cancer care in rural areas among low-income and underserved populations. Most existing cancer control interventions are not ready for direct implementation and dissemination in low-income rural areas. The interventions developed under this funding are then adapted, implemented, and tested in the funded sites – rural North Carolina, Kansas, Tennessee, Mississippi, and three Native American Reservations in South Dakota. Future year amounts will depend on annual appropriations. Progress reports from grantees for the first year will be available in the fall of 2020. Additional information about this project is at:

<https://cancercontrol.cancer.gov/research-emphasis/RFA-CA-8-026.html>.

- Rural Cancer Prevention and Control Activities

The Rural & Minority Health Research Center, with support from NIH/NCI, has been engaged in several research initiatives around cancer prevention and control in rural communities. More information about these studies is located on the Rural Health Research Gateway, which is at: [www.ruralhealthresearch.org](http://www.ruralhealthresearch.org).

#### NIH/ NIMHD

- Appalachians Together Restoring the Eating Environment (Appal-TREE): Advancing Sustainable CBPR Interventions to Improve Healthy Diet in Rural Appalachian Children

Residents of rural Appalachia experience some of the nation's worst health and economic profiles. This project uses an innovative information technology community-based participatory research (CBPR) method to refine and tailor a package of pilot tested healthy eating interventions. This study also evaluates this package of interventions and builds community capacity in social marketing to enhance sustainability of the intervention. These efforts aim to transform consumption patterns and the eating environment so the next generation of rural residents can overcome health disparities. More information about this project is at:

[https://projectreporter.nih.gov/project\\_info\\_description.cfm?aid=9838673&icde=49293958&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=](https://projectreporter.nih.gov/project_info_description.cfm?aid=9838673&icde=49293958&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=).

- Reducing Depressive Symptoms among Rural African Americans (REJOICE)

Rural Black or African Americans are disproportionately impacted by social stressors that place them at risk for experiencing elevated depressive symptoms. This project examines the effectiveness of a culturally adapted behavioral activation intervention REJOICE for use within rural African American churches. This study aims to: 1) refine a culturally appropriate, evidence-based depression intervention based on results from the pilot study; 2) determine whether REJOICE is superior to a usual-care control group at post treatment and a three-month follow-up; 3) collect pilot data regarding "real world"

implementation strategies (i.e. face-to-face training and coaching calls) on the uptake and maintenance of REJOICE in rural African American churches. More information about this study is at:

[https://projectreporter.nih.gov/project\\_info\\_description.cfm?aid=9852892&icde=49294190&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=](https://projectreporter.nih.gov/project_info_description.cfm?aid=9852892&icde=49294190&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=).

- Urban-Rural Disparities in Healthcare Quality for Children with Complex or Disabling Health Conditions

A total of 11.8 million children live in rural areas of the United States, and one-quarter of these children have chronic health conditions. This research evaluates urban-rural disparities in health care utilization and quality for children with complex or disabling health conditions using five years of all-payer claims data from three states: Colorado, Massachusetts, and New Hampshire. This retrospective cohort study of approximately 140,000 children will identify urban-rural disparities in ambulatory, emergency, and inpatient health care utilization; characterize urban-rural disparities in health care quality; identify community and health-system factors associated with urban-rural disparities in health care quality; and construct patient-sharing networks among physicians who care for these children. The aim is to determine how patient-sharing networks differ between rural- and urban-residing children, and whether these differences are associated with disparities in quality of care. More information about this research is at:

[https://projectreporter.nih.gov/project\\_info\\_description.cfm?aid=9862702&icde=49294284&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=](https://projectreporter.nih.gov/project_info_description.cfm?aid=9862702&icde=49294284&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=).

- Factors Associated with Reducing Diabetes-Related Disparities of Rural Latinos

This study addresses health disparities among rural populations, specifically rural Hispanic or Latino residents. This longitudinal study will compare health disparities and patient outcomes of rural Hispanic or Latino and White older adult patients diagnosed with diabetes to ascertain the impact of ACO participation of rural PCPs on the health outcomes of rural patients. The study also will identify factors related to reduced disparities in diabetes-related hospitalization rates of rural Hispanic or Latino older adult patients, including RHC participation in a Medicare ACO. More information about this study is at:

[https://projectreporter.nih.gov/project\\_info\\_description.cfm?aid=9377877&icde=49294344&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=](https://projectreporter.nih.gov/project_info_description.cfm?aid=9377877&icde=49294344&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC&pball=).

## Technical Assistance

### AHRQ

- Medication-Assisted Treatment for Addressing Opioid-Use Disorder (MAT for OUD) Playbook

AHRQ's MAT for OUD Playbook serves as a comprehensive guide for implementing MAT in rural primary care and other ambulatory care settings. The online, interactive playbook contains the latest guidance, tools, and resources to address MAT

implementation. AHRQ's Medication-Assisted Treatment Tools and Resources Collection, released with the Playbook, is a searchable set of tools that address a broad spectrum of patient and community needs. The MAT for OUD Playbook is at: <https://integrationacademy.ahrq.gov/products/mat-playbook/medication-assisted-treatment-opioid-use-disorder-playbook>. The Medication-Assisted Treatment Tools and Resources Collection is at: <https://integrationacademy.ahrq.gov/products/opioid-substance-use-resources/environmental-scan>.

## SAMHSA

- Rural Opioid Technical Assistance (ROTA) Grants

In FY 2019 SAMHSA invested \$14.25 million across 19 awards in the ROTA Grant Program. The purpose of the ROTA Grant Program is to develop and disseminate training and technical assistance for rural communities on addressing opioid issues affecting rural communities. Grantees facilitate the identification of model programs, develop and update materials related to the prevention, treatment, and recovery activities for OUD, and ensure that high-quality training is provided.

## Public-Private Partnership

### NIH/NCI

- L.A.U.N.C.H. (Linking & Amplifying User-Centered Networks through Connected Health): A Demonstration of Broadband-Enabled Health for Rural Populations in Appalachia

In 2018, NCI and FCC have partnered on an innovative effort to focus on how increasing broadband access and adoption in rural areas can improve the lives of rural cancer patients. The L.A.U.N.C.H. initiative has targeted areas of eastern Kentucky that have higher cancer mortality rates and lower levels of broadband access than the rest of the country. This public-private effort also includes the NCI-funded cancer center at the University of Kentucky, the University of California, San Diego's Design Lab, and Amgen. The intent was for the Kentucky effort to be a test-case for community-driven design with respect to Connected Health in cancer care. The project will deliver a blueprint for the Platform for Agile Development (LAUNCH-PAD), which can then be used to promote community-driven, connected health solutions in parallel nationally, at scale.

In 2018, L.A.U.N.C.H. developed and deployed a new cancer distress monitoring tool that can be used in areas with and without broadband. The tool helps patients identify important health concerns related to their cancer treatment, share that with their treatment team and identify ways to manage symptoms, reduce pain and discomfort, and potentially avoid return hospital stays. As the tool completes feasibility testing, it will be more widely deployed across the project's eastern Kentucky service region, with the eventual ability to use it more broadly. The FCC continues to work with communities in the service area to expand access to broadband services. The FCC also has supported

individual satellite links for patients in the interim so they can be linked to their caregivers in Lexington.

#### **Strategy 4: Increase Rural Access to Care**

##### Grants

##### HRSA

- Area Health Education Center (AHEC) Program

In FY 2019 HRSA made 49 awards totaling \$39 million through the AHEC Program. It develops and enhances education and training networks within communities, academic institutions, and community-based organizations to increase diversity among health professionals, broaden the distribution of the health workforce, enhance health care quality, and improve health care delivery to rural and underserved areas and populations. In the most current academic year (AY), 2018-2019, AHEC grantees partnered with 5,513 training sites to provide over 34,600 clinical training experiences to student trainees, 44 percent of which were in rural areas. Also in AY 2018-2019, the new AHEC Scholars Program supported over 2,700 AHEC Scholars. Thirty-six percent of the AHEC Scholars came from a rural background and over half received training in a rural setting. More information on this program is at:

<https://www.hrsa.gov/sites/default/files/hrsa/about/budget/budget-justification-fy2021.pdf>.

- National Health Service Corps (NHSC) Rural Community Loan Repayment Program

The FY 2019 NHSC Rural Community Loan Repayment Program, one of NHSC's loan repayment programs, made 174 awards totaling \$14.1 million to provide loan repayment to providers working in rural communities who use evidence-based treatment models to treat SUD and OUD. As of September 30, 2019, there are over 13,000 primary care medical, dental, and mental and behavioral health practitioners providing service nationwide in the NHSC, 36 percent of which are serving at a rural NHSC-approved site. More information about the NHSC Rural Community Loan Repayment Program is at:

<https://nhsc.hrsa.gov/sites/default/files/NHSC/loan-repayment/nhsc-rural-lrp-fact-sheet.pdf>.

- New Access Points (NAP) for Community Health Centers

In FY 2019, HRSA made 77 awards for a total of \$50 million through the NAP funding to provide operational support for new service delivery sites that deliver primary health care services to improve the health of medically underserved and vulnerable populations. Rural award recipients made up 57 percent of the NAPs funded in this cohort. The investments support new health center service delivery sites that strengthen comprehensive primary health care services in areas where geographic, economic, or cultural barriers limit access to affordable health care. More information about the NAP



awards is at: <https://www.hhs.gov/about/news/2019/09/11/hhs-awards-more-than-50-million-establish-new-health-center-sites.html>.

- Rural Residency Planning and Development (RRPD) Program

The RRPD program awarded 27 grants in FY 2019 totaling approximately \$20.2 million to develop new rural residency programs in family medicine, internal medicine, and psychiatry while achieving accreditation through the Accreditation Council for Graduate Medical Education. Through this funding, HRSA also provided an additional \$2.4 million for a technical assistance partner to support the RRPD awardees.

This program is jointly administered between HRSA's FORHP and its Bureau of Health Workforce (BHW). Research indicates that providers can be influenced to choose careers in primary care and to practice in rural areas in several ways, including positive training experiences in rural and underserved communities and rotations in community based practice locations. Building on these strategies and on past funding opportunities, this program aims to expand the number of accredited rural residency training programs in family medicine, internal medicine, and psychiatry. Either the applicant organization or a consortium's primary training partner must be located in a rural area. A rural residency program must train residents in rural training sites for greater than 50 percent of their total time in residency and focus on producing physicians who will practice in rural communities.

- Emergency Medical Services for Children State Partnership Regionalize of Care Grant Program

From FY 2016 to FY 2020, the Emergency Medical Services for Children State Partnership Regionalization of Care Grant Program awarded three demonstration programs to expand and improve emergency medical services for children for the treatment of trauma or critical care in rural and tribal communities. Demonstration programs developed pediatric systems of care to increase access to pediatric specialists for all children through the development and expansion of facility recognition programs in rural and tribal communities; expanded access to pediatric specialists through telemedicine; and expedited the transfer of children when medically necessary to improve outcomes.

## Policy and Regulatory Efforts

### ACL

- The Veteran Directed Care (VDC) Program

There are 4.7 million rural veterans with 2.7 million enrolled in the VA. ACL and the VA created the VDC program to provide more choice and control to veterans with nursing home level of care needs while supporting VA rebalancing efforts through maximizing veterans' independence at home. In 2019, more than 2,488 veterans accessed VDC from programs at 67 VA Medical Centers in 37 states, DC, and Puerto

Rico. The VA contracts with ACL aging and disability grantees to provide community-based services and supports for these veterans. Veterans using VDC can utilize their budgets to have permanent assignment of workers in rural communities who can come for short durations, multiple times a day, and perform tasks that home care agencies under VA homemaker and health aide services (H/HHA) traditionally do not support. Under the VDC Program, family and friends can provide personal care to veterans, increasing access to long-term services and supports in rural areas where access to H/HHA is limited based on availability of home care agencies.

A VA study found that when compared to veterans enrolled in the VA Homemaker Home Health Aide program, those enrolled in VDC tend to be younger, have higher service-connected disabilities, and live in more rural areas. Follow-up activities or next steps include further implementation and expansion activities in partnership with the VA. More than 30 aging and disability organizations are currently preparing to become contract partners of the VA.

#### HHS Office of Global Affairs (OGA)

- The HHS Exchange Visitor Program

HHS's OGA is responsible for managing the Exchange Visitor Program as it relates to health research and clinical care. The clinical care program recommends waivers of the two-year foreign residency requirement to the U.S. Department of State for J-1 visa holders whom are primary care (family practice, general internal medicine, general pediatrics, or obstetrics/gynecology) or general psychiatric physicians who agree to work for three years in a mental health or primary care HPSA with a score of seven or higher in a FQHC; or a RHC as defined under Sections 1102 and 1861 of the Social Security Act; or a AI/AN tribal medical facility. Recently HHS reviewed the waiver program criteria and adjusted it to increase the ability for rural health facilities to utilize the program. HHS has recommended waivers for approximately 80 clinical care physicians per a year in the last three years and we anticipate seeing an increase in the future.

#### Research and Analysis

##### ACL

- Rehabilitation Research and Training Center (RRTC) on Disability in Rural Communities

The RRTC on Disability in Rural Communities is a five-year grant with eight research projects that focus on research and training about and for people with disabilities in rural communities. Examples of projects include: 1) exploring national datasets to better understand the health of rural-dwelling people with disabilities of all ages compared to people in urban areas and people without disabilities; 2) scaling-up of the evidence-based intervention, Living Well in the Community program, for implementation in rural hospitals; and 3) evaluating the impact of different transportation options on community living outcomes for rural people with disabilities. FY 2019 was the first year of this five-

year project, and no results are available yet. Follow-up activities or next steps include evaluation of the effectiveness of the program.

## NIH/NIGMS

- Rural Health and Health Disparities in the Mountain West Region

NIH/NIGMS funded an IDeA Program Infrastructure for Clinical and Translational Research (IDeA-CTR) cooperative agreement to continue operations of the Mountain West Clinical and Translational Research Infrastructure Network (MW CTR-IN). Coverage of the MW CTR-IN includes seven states: Alaska, Hawaii, Idaho, Montana, Nevada, New Mexico, and Wyoming – regions where the population continues to be plagued by high rates of health disparities and lower life expectancy rates than the rest of the United States.

This project has four major aims:

- Enhance the infrastructure and human resources required to conduct rigorous clinical and translational research in the region at their major public university partners in the Mountain West region.
- Focus on the health disparities experienced by the diverse populations including the medically underserved and/or rural communities in the region.
- Enhance the ability of university partners and investigators to develop competitive clinical and translational research grants for subsequent extramural funding.
- Foster increased collaboration and coordination of clinical and translational activities within and across the region and the 13 MW university partners.

## Rural Health Resources

### CMS

- Improving Access to Maternal Healthcare in Rural Communities

CMS advanced opportunities to address rural maternal health and health equity by convening an interactive forum in June 2019 titled, “A Conversation on Maternal Healthcare in Rural Communities: Charting a Path to Improved Access, Quality and Outcomes” and releasing an issue brief in August 2019 titled “Improving Access to Maternal Healthcare in Rural Communities.” The external summary for the forum is at: <https://www.cms.gov/files/document/rural-maternal-health-forum-summary.pdf>. The issue brief is at: <https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/rural-health/09032019-Maternal-Health-Care-in-Rural-Communities.pdf>.

### HHS Collaborations

- Collaborative Minority Health and Health Disparities Research with Tribal Epidemiology Centers

The Collaborative Minority Health and Health Disparities Research with Tribal Epidemiology Centers initiative supports collaborative research between Tribal

Epidemiology Centers (TEC) and extramural investigators on topics related to minority health and health disparities in AI/AN populations. Eleven of the 12 TECs, which are funded by IHS, serve rural AI/AN populations. Four projects were funded under this initiative and there will be a total of \$5 million invested between 2018 and 2023:

- Arthritis and Autoimmune Disease Epidemiology and Impact in the Alaska Native Population.
- NW Tribal Epi Center Collaboration to Improve the Use of Motor Vehicle Injury Data.
- Impact of Navajo Nation Tax on Junk Food.
- Characterizing Disparities and Elucidating Opportunities Across the Cervical Cancer Continuum among Native American Women.

Additional information about this initiative is at: <https://grants.nih.gov/grants/guide/pa-files/par-17-484.html>.

- Violence and Abuse in Rural America

Violence and Abuse in Rural America is an online guide that addresses abuses that may take place in rural areas and provides an annual update on prevalence, prevention, intersections with poverty, health care, and ACEs in rural communities, and strategies to address existing barriers. These abuses include neglect, child abuse, intimate partner violence (IPV), sexual violence, elder abuse, abuse of people with disabilities, stalking, assault, and homicide. This project is part of a four-year interagency agreement between ACF and HRSA that uses the Rural Health Information Hub (RHIfhub). Information on RHIfhub is at: <https://www.ruralhealthinfo.org>. RHIfhub is funded by FORHP and is a national clearinghouse on rural health issues. The guide is at: <https://www.ruralhealthinfo.org/topics/violence-and-abuse>.

## Conclusion

This Rural Action Plan represents a major HHS strategic commitment to leverage all of the Department's programs to improve rural health and human services. HHS recognizes that it cannot do this alone. As the Department moves to implement this Rural Action Plan, it will require continued partnerships with other federal agencies and work together with states, local governments, and private enterprises to deliver on this Four-Point Strategy for America's 57 million rural residents.

HHS acknowledges that additional challenges regarding the COVID-19 public health emergency have arisen following the development of this Rural Action Plan. These unprecedented challenges will continue to affect the rural health and human services infrastructure; therefore, these issues will need to be addressed concurrently with the other challenges detailed in this Rural Action Plan.

The Secretary's Four-Point Strategy to Transform Rural Health and Human Services provides a framework to guide HHS moving forward. It provides an opportunity for a comprehensive review of the effectiveness of current and planned efforts, which will help shape future of Administrative action in rural health. The Rural Action Plan represents the next phase in the ongoing work of the HHS Rural Task Force. This report covers a variety of programs authorized by Congress and administered by HHS. However, it is important to note that based on an assessment of the effectiveness some of these efforts, HHS does not include funding for some of these programs in the FY 2021 President's Budget request. HHS continues to evaluate the effectiveness of these programs as statutorily required.<sup>1</sup> Throughout FY 2020 and beyond, HHS will continue to implement the new proposals and activities identified in this document, but this is only a beginning.

The intent is to institutionalize not only a focus on rural issues across HHS but to also ensure a better understanding of how HHS programs and policies affect the ability of rural communities to achieve their goals on behalf of rural Americans. HHS seeks to build this into the rulemaking process and how HHS develops and implements programs and supports research that takes into account rural realities. HHS will also use this Rural Action Plan and its federal partnerships to engage rural communities directly working in partnership with the HHS Regional Offices and state partners. This requires an ongoing dialogue with rural stakeholders about how best to build on the initial steps laid out in this document and what additional actions HHS can take in the years ahead.

---

<sup>1</sup> Specific programs noted in the report that are not part of the President's 2021 Budget are: CDC's Preventive Health Services Block Grant and Prevention Research Center Program; HRSA's Rural Health Flexibility Grant Program, Area Health Education Training Center Program, Rural Residency Planning Grant Program, Advanced Nursing Education Nurse Practitioner Residency Integration Program and Emergency Medical Services for Children Program, SAMHSA's Rural Emergency Medical Services Training Grant and NIH's Behavioral Intervention Research to Address Modifiable Risk Factors for Cancer in Rural Populations.

## Appendix A: Upcoming Actions to Support Rural America

Appendix A includes a broader list of upcoming additional planned programs, initiatives, stakeholder engagement, research, analysis, and technical assistance. Not all of the items included below are rural-specific but may have an impact on rural populations or include rural as a potential focus area. The list is not exhaustive and reflects either new activities to address rural health and human service issues in the coming year, or expanded upon past successful rural projects proposals from key agencies and offices across HHS.

### **Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities**

#### Stakeholder Engagement

##### FDA

- Using Social Media to Reach Rural Communities

The FDA's Office of Women's Health (OWH) expects to reach rural communities across the United States by leveraging targeted messaging on social media. The messaging will link with OWH's pregnancy and maternal health webpages that provide valuable information on topics such as OWH's listings of pregnancy exposure registries, information for consumers on medicine and pregnancy, and postpartum depression. The webpage also provides downloadable information and free publications for educational purposes. The expected outcome is to increase awareness and provide valuable resources to help women make informed and healthy choices regarding medicines, foods, and other FDA-regulated products.

### **Strategy 2: Leverage Technology and Innovation**

#### Research and Analysis

NIH/National Institute of Allergy and Infectious Diseases (NIAID)/NICHD/National Institute on Drug Abuse (NIDA)/NIGMS/National Institute of Neurological Disorders and Stroke (NINDS)

- Clinical Sites for the ECHO IDeA States Pediatric Clinical Trials Network

The Clinical Sites in the Environmental Influences on Child Health Outcomes (ECHO) IDeA States Pediatric Clinical Trials Network (ISPCTN) is designed for multicenter clinical trials research to assure participation of children living in rural or underserved communities located in IDeA states. This initiative is also building pediatric research capacity for IDeA states to support the conduct of clinical trials of relevance to rural or underserved children and to enhance the health of children for generations to come. The five focus areas for ECHO program research are pre-, peri-, and postnatal outcomes; obesity; upper and lower airways; neurodevelopment; and positive health.

## NIH/ NICHD

- NICHD’s Leading Role in Research on All Aspects of Maternal Morbidity and Mortality

Through grants and contracts, NICHD funds the majority of NIH research on conditions specifically related to research on maternal morbidity and mortality, which aligns with the HHS priority area, “Addressing maternal mortality and morbidity.” NICHD co-leads, with the NIH Office of Research on Women’s Health and the Office of the Director. NICHD, through the National Academy of Sciences, supported the landmark 2020 report, *Birth Settings in America: Outcomes, Quality, Access, and Choice*, which describes the impact of different birth settings and other social factors of maternal morbidity and mortality.<sup>104</sup> In addition, NICHD provided research and support for the Federal Task Force on Research to Pregnant and Lactating Women (PRGLAC), which completed its second phase in early 2020 and is now leading an implementation plan for Task Force recommendations submitted last year to the secretary HHS. More information about this program is at: <https://www.nichd.nih.gov/about/advisory/PRGLAC>.

- Reducing Severe Maternal Morbidity and Mortality in Disproportionately Affected Populations

A cross-NIH initiative, under development by the NICHD, will use a dual-pronged approach targeted at reducing severe maternal morbidity and mortality and addressing health disparities in populations disproportionately affected by maternal mortality, including rural populations, AI/NA, and Black or African American populations. The complementary aims of the initiative will encompass social, bio-behavioral, and fundamental science approaches to address multi-faceted factors that contribute to maternal mortality. The initiative’s first-year focus on pregnancy and up to one year post-partum aligns with the HHS priority area, “Addressing maternal mortality and morbidity.”

- Community-Tailored Approaches to Reducing Maternal Morbidity and Mortality

NIH will leverage promising practices and expand adaptation, application, and evaluation of effective interventions and tools through community-tailored approaches, including in rural communities. Components will include efforts to establish partnerships between communities and researchers to understand elements of successful interventions to prevent maternal morbidity and mortality and to develop and implement specific models of care that are tailored to meet the needs of each community. This effort is aligned with the HHS priority area, “Addressing maternal mortality and morbidity.”

### **Strategy 3: Focus on Preventing Disease and Mortality**

#### Grants

##### SAMHSA

- Innovative Activities for Evidence-Based Treatment Interventions

The State Opioid Response (SOR) program addresses the opioid crisis by increasing access to MAT using the three FDA-approved medications for the treatment of OUD (including prescription opioids, heroin, and illicit fentanyl and fentanyl analogs), reducing unmet treatment need and opioid overdose-related deaths through the provision of prevention, treatment, and recovery activities. Grants were awarded to states and territories via formula. The program also included a 15 percent set-aside for the ten states with the highest mortality rates related to drug overdose deaths. For FY 2020, there are 57 active SOR grants funded by \$1.5 billion for grants to states to address the opioid crisis. There is \$50 million provided for grants to Indian Tribes or Tribal organizations, and a 15 percent set-aside for states with the highest age-adjusted mortality rate related to opioid overdose deaths.

##### HHS Office of the Assistant Secretary for Health (OASH)

- Healthy People (HP) 2020/2030

HP provides science-based, 10-year national objectives for improving the health of all Americans. For four decades, HP has established benchmarks and monitored progress over time in order to: encourage collaborations across communities and sectors, empower individuals toward making informed health decisions, and measure the impact of prevention activities. Much of the data collected during HP programs can be stratified by urban/rural. A number of webinars and stories from the field can also be used to highlight rural communities.

- Move Your Way Campaign

The Office of Disease Prevention and Health Promotion (ODPHP), within OASH, created the Move Your Way campaign to promote the recommendations from the second edition of the Physical Activity Guidelines for Americans (released November 2018). Of the campaign's eight pilot sites, two will serve rural communities. The campaign encourages consumers to get more physical activity by making the recommendations accessible and achievable. The campaign was developed through extensive formative research which identified a place-based approach as a promising method for increasing levels of physical activity among the target audience. As such, ODPHP adapted a community-based prevention marketing framework to distribute the campaign at the community level.



- National Infrastructure for Mitigating the Impact of COVID-19 within Racial and Ethnic Minority Communities

In FY 2020, the HHS Office of Minority Health is funding a \$40 million three-year cooperative agreement for an initiative to develop and coordinate a strategic and structured national network of national, state, territorial, tribal, and local public and community-based organizations that will mitigate the impact of COVID-19 on racial and ethnic minority, rural, and socially vulnerable populations through the: (1) coordinated development and dissemination of culturally and linguistically diverse information; (2) dissemination of COVID-19 information on testing, vaccination, and other health care and social services, especially in geographic areas highly impacted by COVID-19 and at highest risk for adverse outcomes; and (3) dissemination of effective strategies for COVID-19 response, recovery, and resilience. The initiative is expected to: (1) improve the reach of COVID-19-related public health messaging to racial and ethnic minority, rural, and socially vulnerable populations; (2) increase the connection to health care and social services for racial and ethnic minority, rural, and socially vulnerable populations; (3) decrease disparities in COVID-19 testing and vaccination rates among racial and ethnic minority populations in highly impacted geographic areas; and (4) enhance states, territories, and tribal organizations' capacity and infrastructure to support response, recovery, and resilience for racial and ethnic minority, rural, and socially vulnerable populations.

#### HRSA

- Oral Health Literacy Awareness and Education Campaign

In FY 2020, HRSA is funding an approximately \$300,000 contract to create a comprehensive Oral Health Literacy Awareness and Education campaign based upon evidence-based oral health literacy strategies. Oral health literacy is the degree of a person's capacity to obtain, process, and understand basic oral health information and services needed to make appropriate oral health decisions. Challenges remain in accessing quality oral health care for some Americans. Social, cultural, economic, and geographic issues are contributing factors leading to poorer oral health outcomes. The campaign will promote effective evidence-based oral health literacy strategies focused on oral health education and awareness including the prevention of oral diseases and promoting oral health and overall health for HRSA constituent populations including those in rural areas. The contract will be awarded in the spring of 2020.

#### FDA

- "The Real Cost" Smokeless Tobacco Prevention Campaign

This smokeless tobacco public education, "The Real Cost" Smokeless Tobacco Prevention Campaign, is designed to educate at-risk rural male youth ages 12-17 about the dangers of using smokeless tobacco, such as dip or chew. Although the campaign was launched in 2016, the funding will continue in 2020 as a digital campaign in 20 states with a high prevalence of smokeless use among youth. The campaign goal is to

reach at least 70 percent of teen boys at least 25 times each quarter through a mix of online videos and digital ads. The central message of the FDA campaign is "smokeless doesn't mean harmless", which aims to motivate these targeted teenagers to reconsider what they think they know about smokeless tobacco. In 2019, the campaign touched 35 counties in 20 states reaching nearly two million rural youth. Information about the campaign is at: <https://www.fda.gov/tobacco-products/public-health-education/real-cost-campaign>.

## Research and Analysis

### FDA

- FDA research grant on "Improving FDA Health Communications with Older Women in the U.S. Regarding FDA-Regulated Products"

In FY2018, the FDA's Office of Women's Health funded and began collaborating on a research study designed to improve FDA health communications to older women about medications, vaccines, nutrition, and cosmetics. By conducting focus groups in rural and urban communities around the country, researchers will be able to consider differences in the health communication needs, behavior, and preferences of rural and urban women. Research collaborators include the University of Maryland, Baltimore and FDA's Center for Drug Evaluation and Research, Center for Biologics Evaluation and Research, and Center for Food Safety and Applied Nutrition. This study will support FDA's efforts to provide effective and easily understood information about FDA-regulated products to older women that can help them use such products appropriately.

## **Strategy 4: Increase Rural Access to Care**

### Grants

#### HRSA

- Emergency Medical Services for Children (EMSC) Innovation and Improvement Center Program

In FY 2020, the EMSC Innovation and Improvement Center Program is awarding one cooperative agreement to demonstrate effective methods that improve the clinical care and management of pediatric patients within the EMS system through mechanisms such as improving access to pediatric EMS expertise for EMSC recipients and stakeholders; implementing the Quality Improvement Collaboratives (QIC), addressing the unique needs of pediatric patients in rural health care systems; strengthening communication within the EMSC community; and creating a central repository of pediatric evidence-based resources for prehospital and hospital ED professionals.

## Appendix B: Highlighting Recent Rural Efforts

Appendix B includes a broader list of additional programs, initiatives, stakeholder engagement, research, analysis, and technical assistance. This list is not exhaustive and reflects recent activities that addressed rural health and human service issues and highlights past successful rural-related projects from key agencies and offices across HHS. This includes some programs with rural as a potential focus area.

### **Strategy 1: Build a Sustainable Health and Human Services Model for Rural Communities**

#### Research and Analysis

##### HHS ASPE

- Analyses on Issues Related to Rural Health

Within HHS, ASPE advises the Secretary on policy development in health, disability, human services, data, and science; and provides advice and analysis on economic policy. In 2019, ASPE produced two rural health policy analyses:

- Accountable Care Organization (ACO) Participation Market Factors

This study looked at the market factors that drive participation in ACOs. Researchers at ASPE found markets with low physician concentration are more likely to participate in ACOs including in rural areas. However, most rural counties have high physician concentration and are less likely to have ACOs. They also found that moderate MA penetration also facilitates ACO participation. ASPE anticipates publishing the results of this study in 2020.

- Small Rural Practice Participation in the CMS Merit-based Incentive Payment System (MIPS)

Based on interviews with small rural practices, this report describes initial barriers that practices identified to participating in the MIPS under the Quality Payment Program in the first year. The report is at: <https://aspe.hhs.gov/pdf-report/perspectives-physicians-small-rural-practices-medicare-quality-payment-program>.

## Strategy 2: Leverage Technology and Innovation

### Policy and Regulatory Efforts

#### Office of the National Coordinator for Health Information Technology (ONC)

- Trusted Exchange Framework and Common Agreement (TEFCA)

A critical barrier for rural communities is the cost associated with health IT and the need to join multiple networks that do not connect with one another in order to have the information needed to support a patient's care. TEFCA outlines a common set of principles, terms, and conditions to support the development of a Common Agreement that would enable nationwide exchange of electronic health information (EHI) across disparate health information networks (HINs). TEFCA is designed to scale EHI exchanges nationwide and help ensure that HINs, health care providers, health plans, individuals, and many more stakeholders—including rural communities—have secure access to their EHI when and where it is needed most. This “network of networks” approach would enable existing and future networks to share EHI with each other without having to join multiple networks, which may be financially costly to rural communities. On September 3, 2019, ONC announced that The Sequoia Project was awarded a cooperative agreement to serve as the Recognized Coordinating Entity (RCE) to develop, update, implement, and maintain the Common Agreement. The RCE will support the goals of TEFCA to provide a single on-ramp to allow all types of health care stakeholders, including rural providers, an opportunity to join any network and therefore participate in a nationwide exchange. More information about TEFCA is at: <https://www.healthit.gov/topic/interoperability/trusted-exchange-framework-and-common-agreement>.

- Rulemaking Provisions to Advance Virtualization of Care

On March 9, 2020, ONC released the ONC Cures Act Final Rule (85 FR 25642), which implements provisions of the 21<sup>st</sup> Century Cures Act. As part of the rule, ONC finalized updates to the 2015 Edition of certification criteria for health IT that will require the use of standardized application programming interfaces (APIs) for sharing patient medical records. As a result of this rule, patients will be able to securely and easily obtain and use their electronic health information from their provider's medical record at no additional cost, using the smartphone app of their choice. The rule also provides more flexibility to health care providers in the software they choose for their practice. This flexibility and choice can aid rural communities by giving them more options and ways to use health IT to support the care continuum on which rural patients and rural providers rely. More information about the ONC Cures Act is at: <https://www.healthit.gov/curesrule>.

- Patient Unified Lookup System for Emergencies (PULSE)

ONC is funding the further development of PULSE. This project would create a technical infrastructure that enables state and local governments to access PULSE software. If states and rural communities are able to fully implement PULSE, the first

responder community and disaster health care volunteers in rural communities could have access to essential patient information during disasters or emergencies. With a simple search on PULSE, authenticated providers can access medications, allergies, diagnoses, and lab results for patients who are displaced outside of their normal health care environment. PULSE would allow health care volunteers and first responders to appropriately triage and treat patients who are located at alternative care facilities and shelters.

## Research and Analysis

### NIH/ NICHD

- Smart Early Screening for Autism Communication Disorders in Primary Care

Pediatric PCPs in the Florida panhandle are working with researchers to evaluate a new, automated online version of the well-established “Early Screening for Autism and Communication Disorders (ESAC)” screening. The ESAC is used in pediatric practices to screen infants and toddlers for whom a diagnostic workup and possibly early intervention may be indicated. The new “Smart ESAC” is designed as a universal screen for communication delays and autism spectrum disorders (ASD) in young patients (ages 12 to 18 months). Participating providers are at sites in small urban and rural health care settings, in a region characterized by diversity in race, ethnicity, and socioeconomic level. Families will be invited to participate in diagnostic evaluations of children who screen positive. Screened children, recruited at age 12 months, will be followed over five years.

- Telemedicine for Ambulatory Pediatric Care

The overall goal of this study was to determine how telemedicine is currently used for ambulatory pediatric subspecialty care, identify potential barriers, and develop novel methods of delivering appropriate telemedicine care in order to overcome disparities and improve health in vulnerable populations, such as rural, minority, and uninsured children. This career development award generated multiple studies in telemedicine advancement. Next steps include large scale patient-engaged studies to examine and improve the diffusion and impact of new innovations in pediatric health care delivery. More information about this study is at:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5754191/>.

## Technical Assistance

### ACF

- HHS SOAR Online Training on Human Trafficking

The HHS SOAR to Health and Wellness Training provides an accredited training designed to educate health care providers, social workers, public health professionals, and behavioral health professionals on how to identify, treat, and respond appropriately to individuals who are at risk or who have been trafficked. The target audience includes physicians, pharmacists, pharmacy technicians, registered nurses, dentists, psychologists,

social workers, case managers, school counselors, public health professionals, health education specialists, and allied health professionals.

SOAR Online includes the following modules: SOAR to Health and Wellness, Trauma-Informed Care, and Culturally and Linguistically Appropriate Services, SOAR for Behavioral Health, SOAR for Public Health, SOAR for Health Care, SOAR for Social Services, SOAR for School-Based Professionals, and SOAR for Native Communities. These training courses include case examples with victims and professionals in rural communities and provide strategies for building multidisciplinary referral networks and improving their capacity to respond. Training content is available in English and Spanish. In FY 2020, HHS developed two new modules for professionals serving Native communities and school-based professionals.

### HHS Collaborations

- Addressing Health and Human Services in Rural Opportunity Zones (OZs) and Other Distressed Communities

OZs provide incentives for long-term private sector investment in economically distressed communities. Approximately 40 percent of the OZs are in rural areas. State executives nominated census tracts to become qualified OZs to the U.S. Department of the Treasury, which then certified the tracts. The OZ designation encourages investment in these census tracts by granting investors extensive federal tax advantages for using their capital gains to finance new projects and enterprises (or substantially improve existing projects and enterprises) located within qualified zones.

IOS and ASPE are coordinating efforts to link HHS programs with the administration's larger OZs effort, and this includes targeting technical assistance and other resources to OZs to support these communities' health and human services goals.

### IHS

- Emergency Medicine Education and Standardization of Quality of Care

IHS provides ongoing ultrasound training for physicians and providers throughout the United States involved in Native American and rural emergency medicine through an annual conference and monthly educational meetings on didactic clinical and leadership topics.

### **Strategy 3: Focus on Preventing Disease and Mortality**

#### Grants

##### ACL

- The Older American Act Grants

In FY 2019, ACL provided \$1.5 billion in funding through the Older Americans Act grants to provide supportive, nutrition, and caregiver support services to maintain or improve the health and independence of older individuals and to enable them to remain in their homes and communities. The targeted populations include individuals living in rural areas. Results for this specific period are pending but, historically, 34 percent of people served live in rural areas, whereas approximately 19 percent of older persons live in rural areas - indicating that targeting is effective.

##### SAMHSA

- Linking Actions for Unmet Needs in Children's Health in American Indian/Alaskan Native Communities (Indigenous Project LAUNCH)

In FY 2017, SAMHSA provided \$7.6 million in funding across 13 grants through Indigenous Project LAUNCH. The purpose of Indigenous Project Launch is to promote the wellness of young children from birth to eight years within tribes, territories, and Pacific Island jurisdictions by addressing the physical, social, emotional, cognitive, and behavioral aspects of their development. The goal of Project LAUNCH is for children to be thriving in safe, supportive environments, and entering school ready to learn and able to succeed. Given the focus on tribal populations, a significant portion of the funding and impact is in rural areas.

- Tribal Behavioral Health Grant Program (Native Connections)

In FY 2019, SAMHSA awarded \$12.8 million across 51 new grants through the Native Connections program. Native Connections is a five-year grant program designed to prevent and reduce suicidal behavior and substance use, reduce the impact of trauma, and promote mental health among AI/AN youth through the age of 24 years. The program is intended to reduce the impact of mental and SUD, foster culturally responsive models that reduce and respond to the impact of trauma in AI/AN communities, and allow AI/AN communities to facilitate collaboration among agencies to support youth as they transition into adulthood.

Including the 51 new FY 2019 awardees, SAMHSA has supported 174 grantees across five cohorts (FY 2015 through FY 2019) for a total of \$40 million. In FY 2018, Native Connections provided outreach to 796,715 youth who were contacted through program outreach efforts; 103,000 youth were screened for mental health or related services; and 6,000 youth were referred to mental health or related services.

## HHS Collaborations

- Project Catalyst

Project Catalyst is a multi-year collaboration between ACF and HRSA to implement statewide training and policy initiatives for HRSA-funded health centers and domestic violence programs. ACF made one award for \$1.5 million over a three-year project period to the National Health Resource Center on Domestic Violence (HRC DV) to serve as the project's technical lead and to contract with cohort members.

As part of Project Catalyst, leadership teams comprised of primary care associations, state departments of health, and state domestic violence coalitions lead training focused on educating public health workers on IPV, sexual violence, and human trafficking. Project Catalyst has reached rural communities in Arkansas, Colorado, Idaho, Iowa, and North Carolina and will reach Georgia, Minnesota, and Ohio in Phase III (FY 2020), which includes a priority focus on rural and geographically isolated health centers and IPV/human trafficking programs.

Leaders from Phase I (FY 2018) and Phase II (FY 2019) located in rural states (Colorado and Iowa) will disseminate promising practices related to rural mobile advocacy and building partnerships across rural health care systems related to these issues. States in Phase I adopted incentives or mandates to encourage health center response to IPV/HT (AR, CT, ID, IA) and integrated IPV/HT tracking into population health initiatives (CT and ID). In Phase II, North Carolina applied Project Catalyst strategies to inform IPV-related work in its Medicaid health system transformation. More information about training is at: <https://ipvhealthpartners.org/>.

## Research and Analysis

### FDA

- Journal Supplement – “Tobacco and Health Equity: Interventions, Research and Strategies to Address Tobacco Use Among Diverse Populations”

The FDA Office of Minority Health and Health Equity (OMHHE) sponsored a journal supplement in the January 2020 issue of Health Promotion Practice in collaboration with FDA's Center for Tobacco Products, entitled “Tobacco and Health Equity: Interventions, Research, and Strategies to Address Tobacco Use Among Diverse Populations.” The supplement features a compilation of articles focused on tobacco-related research and interventions that contribute to understanding health disparities among diverse populations, such as Black or African Americans, Hispanic or Latinos, American Indian and Alaska Natives, veterans, lesbian, gay, bisexual, transgender, or queer (LGBTQ) persons, and rural and urban communities. The supplement features a compilation of 18 articles available to the public. The supplement is at: [https://journals.sagepub.com/toc/hppa/21/1\\_suppl](https://journals.sagepub.com/toc/hppa/21/1_suppl).



## NIH/NCI

- Accelerating Colorectal Cancer Screening and Follow-up through Implementation Science (ACCSIS)

ACCSIS supports research to build the evidence base on multilevel interventions to increase rates of colorectal cancer (CRC) screening, follow-up, and referral to care. Five projects were funded for a total investment of \$6 million, with four focusing on rural areas. Additionally, supplements were awarded to three NCI-Designated cancer centers with a focus on American Indian populations in the Southwest and Southern Plains. The first phase of these projects focuses on pilot studies that demonstrate the feasibility and potential effectiveness of multilevel interventions at increasing colorectal cancer screening and follow-up. The second phase involves testing the implementation and impact of the multilevel interventions in target populations with low colorectal cancer screening rates. More information about this initiative is at:

<https://healthcaredelivery.cancer.gov/accsis/>.

## Rural Health Resources

### HRSA

- Critical Crossroads Care Pathway Toolkit

With the rising number of children seeking care for a mental health crisis presenting to the ED, hospitals in rural areas bear an excessive burden responding to such crises, given their limited mental health services. In 2019, HRSA published “Critical Crossroads: Pediatric Mental Health Care in the Emergency Department”, a toolkit that aims to improve identification, management, and continuity of care of children and adolescents who present to the ED in a mental health crisis. This toolkit was developed in partnership between HRSA’s MCHB EMSC Program and FORHP. Other federal agencies that contributed to the development of the toolkit include several operating divisions of HHS, the U.S. Department of Transportation, and the U.S. Department of Justice. More information about the toolkit is available at: <https://www.hrsa.gov/critical-crossroads>.

- Oral Health Literacy

In FY 2019, HRSA invested \$250,000 across three awardees through the National Organizations for State and Local Officials (NOSLO) cooperative agreement to develop an oral health awareness and education campaign with a specific emphasis on relevant HRSA populations including rural communities. The collective work of three cooperative agreement awardees strengthens the evidence base and leverages strategies and existing infrastructure to assess the impact of oral health literacy materials among state and local health department staff, who provide oral health care services to their respective constituents. In addition, this initiative investigates how these materials could be incorporated into various public health policies for national, state, and local policymakers to improve the oral health of HRSA’s constituent populations, which

include those in rural areas. This work addresses the persistent oral health disparities in rural areas.

## Stakeholder Engagement

### NIH

- Rural Health Seminar

The Inaugural NIH Rural Health Seminar—co-sponsored by the National Center for Advancing Translational Sciences, the National Institute of Mental Health and the National Institute on Minority Health and Health Disparities, and with additional contributions from the National Cancer Institute, the National Heart, Lung, and Blood Institute, the National Institute on Aging, the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the National Institute on Drug Abuse, the National Institute of Dental and Craniofacial Research, the National Institute of Diabetes and Digestive and Kidney Diseases, the National Institute of General Medical Sciences, and the National Institute of Nursing Research—brought together researchers, medical practitioners, and others to explore topics in rural health and to share research ideas on how innovations in clinical and translational science could improve rural health outcomes. The webcast is at: <https://videocast.nih.gov/launch.asp?28875>.

### HHS Collaborations

- Mental Health in Agricultural Communities

In 2019, CDC's Office of the Associate Director for Policy and Strategy (OADPS) and HRSA's FORHP initiated a cross-agency effort to highlight the issue of mental health in agricultural communities. The two offices co-hosted a planning meeting in February 2019 that included federal partners (CDC, CMS, HRSA, SAMHSA, USDA), national-level stakeholders (e.g., National Association for Rural Mental Health, American Farm Bureau Federation, National Farmers Union), academic partners (University of Wisconsin-Madison, University of South Florida), and others (e.g., Farm Credit Council, National Young Farmers Coalition). The partners continue to hold planning calls and convened a second in-person strategic planning meeting in February 2020. The group will also continue to identify resources, additional partners to involve in this work, and identify any gaps that have yet to be addressed. The goal of this ongoing collaboration is to continue raising awareness surrounding mental health issues in agricultural communities. Through this multi-stakeholder partnership, CDC and HRSA hope to both collectively find ways to improve the mental health of rural agricultural communities as well as determine ways in which the two agencies can continue to work in this space while avoiding duplication.

In 2019, CDC initiated a cross-agency effort aimed at increasing emotional well-being (EWB) within individuals and populations, including different geographical areas such as rural agricultural communities. CDC considers EWB as necessary to advance its mission to prevent disease and injury and improve quality of life. EWB is also integral to

reducing health disparities and improving resilience and adoption of protective behaviors and self-management. This effort is currently coordinated by the Division of Population Health, NCCPHDP.

## Research and Analysis

### HHS OASH

- Healthy People (HP) 2020

HP 2020 provided national disease prevention and health promotion objectives to achieve over a 10-year period (2010-2020). OASH, in collaboration with CDC's NCHS, continues to expand new data tools and products that stratify the data by metropolitan versus non-metropolitan. OASH developed a series of webinars and stories from the field to highlight rural communities.

## Technical Assistance

### CDC

- CDC's Clinical ECHO Program

Rural residents experience a higher incidence of Traumatic Brain Injury (TBI) and less access to resources to manage their injuries. In order to fill some of these clinical gaps, CDC, in partnership with the American Academy of Pediatrics (AAP), started a TBI-specific ECHO. The purpose of this program is to educate rural PCPs on the proper diagnosis and management of both simple and complex TBI patients. Additionally, the purpose is to increase the self-efficacy of PCPs to diagnose and treat TBI patients in their home communities and decrease the need for TBI patients to travel far distances to receive appropriate acute and follow-up care.

- CDC's School-Based ECHO

AAP, along with the CDC TBI team, developed a school-based TBI ECHO to better equip school personnel with the resources and information they need to help transition students who have experienced a TBI back to the classroom. These personnel (e.g., school nurses, teachers, and administrators) receive training through the ECHO model in place of the need to travel to attend concussion safety training in person, which could potentially be 50 to 100 miles from their home community. The purpose of this program is to educate school personnel about their state's law surrounding concussions and youth, as well as inform them of best practices in assisting students return to school (and play) following a TBI. The program also aims to increase the self-efficacy of each of these personnel types to recognize concussion symptoms and develop a plan to help the student safely return to their normal activities after their injury, with a specific focus on their return to school.

## FDA

- FDA Professional Development Program in Food Science

Fourteen rural schools took part in an innovative FDA program that provides education on food safety and nutrition to help promote healthy eating and reduce food and nutrition-related disease and mortality. The FDA Professional Development Program in Food Science is a sustained six-day training opportunity for middle and high school science, health, and family and consumer science teachers. Program graduates commit to using the Science and Our Food Supply curriculum in their classrooms and to training other teachers (15-20) in their area of the country in a six-hour workshop. The curriculum was co-developed in collaboration with the National Science Teaching Association.

## **Strategy 4: Increase Rural Access to Care**

### Grants

#### HRSA

- Advanced Nursing Education – Nurse Practitioner Residency Program

In FY 2019, HRSA's BHW awarded \$17.7 million to 36 residency programs, three of which are located in rural areas, through the Advanced Nursing Education – Nurse Practitioner Residency Program. This program supports clinical and academic-focused, 12-month Nurse Practitioner Residency programs that prepare new nurse practitioners for primary care practice in community-based settings with a preference for those projects that benefit rural or underserved populations.

## Citations

---

- <sup>1</sup> Health Resources and Services Administration. “Defining Rural Population.” Last Modified December 2018. <https://www.hrsa.gov/rural-health/about-us/definition/index.html>. (Accessed May 6, 2020).
- <sup>2</sup> U.S. Department of Agriculture. 2017. *Report to the President of the United States from the Task Force on Agriculture and Rural Prosperity*. Washington, DC: U.S. Department of Agriculture. <https://www.usda.gov/sites/default/files/documents/rural-prosperity-report.pdf>. (Accessed May 6, 2020).
- <sup>3</sup> HHS Tracking Accountability in Government Grants System (TAGGS). “Grants by Location – US by Metropolitan and Non-Metropolitan.” [https://taggs.hhs.gov/ReportsLocation/GrantsByLocation\\_MetroNonmetro](https://taggs.hhs.gov/ReportsLocation/GrantsByLocation_MetroNonmetro). (Accessed May 6, 2020).
- <sup>4</sup> Iezzoni, Lisa I., Mary B. Killeen, and Bonnie L. O’Day. 2006. “Rural Residents with Disabilities Confront Substantial Barriers to Obtaining Primary Care.” *Health Services Research* 41 (4p1): 1258-1275. <https://doi.org/10.1111/j.1475-6773.2006.00534.x>.
- <sup>5</sup> Traci, M., and T. Seekins. 2014. “Integration of Chronic Disease and Disability and Health State Programs in Montana.” *Disabil Health J* 7 (1): 19-25. <https://doi.org/10.1016/j.dhjo.2013.10.006>.
- <sup>6</sup> Greiman, L., S. P. Fleming, B. Ward, A. Myers, and C. Ravesloot. 2018. “Life Starts at Home: Bathing, Exertion and Participation for People With Mobility Impairment.” *Arch Phys Med Rehabil* 99 (7): 1289-1294. <https://doi.org/10.1016/j.apmr.2017.11.015>.
- <sup>7</sup> Sage, Rayna, Bryce Ward, Andrew Myers, and Craig Ravesloot. 2019. “Transitory and Enduring Disability Among Urban and Rural People.” *The Journal of Rural Health* 35 (4): 460-470. <https://doi.org/10.1111/jrh.12338>.
- <sup>8</sup> Rural Health Information Hub. “What is Rural?”. Last Modified April 8, 2019. <https://www.ruralhealthinfo.org/topics/what-is-rural>. (Accessed May 6, 2020).
- <sup>9</sup> Garcia, M. C., M. Faul, G. Massetti, C. C. Thomas, Y. Hong, U. E. Bauer, and M. F. Iademarco. 2017. “Reducing Potentially Excess Deaths from the Five Leading Causes of Death in the Rural United States.” *MMWR Surveill Summ* 66 (2): 1-7. <https://doi.org/10.15585/mmwr.ss6602a1>.
- <sup>10</sup> Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill. 2014. “170 Rural Hospital Closures: January 2005 – Present (128 since 2010).” <https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/>. (Accessed May 6, 2020).
- <sup>11</sup> Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill. “Trends in Risk of Financial Distress among Rural Hospitals, 2015 to 2019.” <https://www.shepscenter.unc.edu/product/trends-in-risk-of-financial-distress-among-rural-hospitals-2015-to-2019/>. (Accessed May 6, 2020).
- <sup>12</sup> Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill. 2014. “170 Rural Hospital Closures: January 2005 – Present (128 since 2010).” <https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/>. (Accessed May 6, 2020).
- <sup>13</sup> Thomas, Sharita R., Brystana G. Kaufman, Randy K. Randolph, Kristie Thompson, Julie R. Perry, and George H. Pink. 2015 April “A Comparison of Closed Rural Hospitals and Perceived Impact.” *NC Rural Health Research Program: Findings Brief*.

---

[https://www.shepscenter.unc.edu/wp-content/uploads/dlm\\_uploads/2015/08/AfterClosureApril2015\\_Correction.pdf](https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2015/08/AfterClosureApril2015_Correction.pdf). (Accessed May 6, 2020).

<sup>14</sup> MEDPAC. 2019 March. *Report to the Congress: Medicare Payment Policy*

[http://medpac.gov/docs/default-source/reports/mar19\\_medpac\\_entirereport\\_sec.pdf?sfvrsn=0](http://medpac.gov/docs/default-source/reports/mar19_medpac_entirereport_sec.pdf?sfvrsn=0).

<sup>15</sup> Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill. "171 Rural Hospital Closures: January 2005 - Present (129 since 2010): Rural Hospital Closures: More Information." <https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures-archive/rural-hospital-closures/>. (Accessed August 12, 2020).

<sup>16</sup> Hung, Peiyin, Carrie E. Henning-Smith, Michelle M. Casey, and Katy B. Kozhimannil. 2017. "Access To Obstetric Services In Rural Counties Still Declining, With 9 Percent Losing Services, 2004–14." *Health Affairs* 36 (9): 1663-1671. <https://doi.org/10.1377/hlthaff.2017.0338>.

<sup>17</sup> Hung, P, K Kozhimannil, C Henning-Smith, and M Casey. 2017 April "Closure of Hospital Obstetric Services Disproportionately Affects Less-Populated Rural Counties." *University of Minnesota Rural Health Research Center: Policy Brief: 4*. <https://3pea7g1qp8f3t9ooe3z3npx1-wpengine.netdna-ssl.com/wp-content/uploads/2017/04/UMRHRCOBClosuresPolicyBrief5.2.19.pdf>. (Accessed May 6, 2020).

<sup>18</sup> "QuickStats: Infant Mortality Rates For Metro and Nonmetro Counties,\* by Race and Hispanic Origin - National Vital Statistics System, United States, 2017." 2020. *MMWR Morb Mortal Wkly Rep* 69 (3): 95. <https://doi.org/10.15585/mmwr.mm6903a6>.

<sup>19</sup> Iglehart, J. K. 2018. "The Challenging Quest to Improve Rural Health Care." *N Engl J Med* 378 (5): 473-479. <https://doi.org/10.1056/NEJMp1707176>.

<sup>20</sup> Rural Health Research Center. 2016 September. "Supply and Distribution of the Behavioral Health Workforce in Rural America." *Data Brief* 160: 6.

[https://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/09/RHRC\\_DB160\\_Larson.pdf](https://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/09/RHRC_DB160_Larson.pdf). (Accessed May 6, 2020).

<sup>21</sup> Rural Health Information Hub. "Social Determinants of Health."

<https://www.ruralhealthinfo.org/toolkits/disabilities/1/social-determinants>. (Accessed May 6, 2020).

<sup>22</sup> Lahr, M, H Neprash, C. Henning-Smith, M.S. Tuttle, and A.M. Hernandez. 2019 December 30. "Access to Specialty Care for Medicare Beneficiaries in Rural Communities." *University of Minnesota Rural Health Research Center: Policy Brief: 5*. [https://3pea7g1qp8f3t9ooe3z3npx1-wpengine.netdna-ssl.com/wp-content/uploads/2019/12/UMN-Access-to-Specialty-Care\\_12.4.pdf](https://3pea7g1qp8f3t9ooe3z3npx1-wpengine.netdna-ssl.com/wp-content/uploads/2019/12/UMN-Access-to-Specialty-Care_12.4.pdf).

<sup>23</sup> Administration for Community Living. 2019 July 26. *Issue Briefings: Wheelchair-Accessible Medical Diagnostic Equipment: Cutting Edge Technology, Cost-Effective for Health Care Providers, and Consumer-Friendly* <https://acl.gov/aging-and-disability-in-america/issue-briefings>. (Accessed June 9, 2020).

<sup>24</sup> Butkus, R., K. Rapp, T. G. Cooney, and L. S. Engel. 2020. "Envisioning a Better U.S. Health Care System for All: Reducing Barriers to Care and Addressing Social Determinants of Health." *Ann Intern Med* 172 (2\_Supplement): S50-s59. <https://doi.org/10.7326/m19-2410>.

<sup>25</sup> Daniel, Hilary, Sue S. Bornstein, Gregory C. Kane, for the Health, and Public Policy Committee of the American College of Physicians. 2018. "Addressing Social Determinants to Improve Patient Care and Promote Health Equity: An American College of Physicians Position Paper." *Annals of Internal Medicine* 168 (8): 577-578. <https://doi.org/10.7326/m17-2441>.

- 
- <sup>26</sup> Cromartie, John, and Dennis Vilorio. 2019 February 15. "Rural Population Trends." <https://www.ers.usda.gov/amber-waves/2019/february/rural-population-trends/>. (Accessed May 6, 2020).
- <sup>27</sup> Zhao, G., C. A. Okoro, J. Hsia, W. S. Garvin, and M. Town. 2019. "Prevalence of Disability and Disability Types by Urban-Rural County Classification-U.S., 2016." *Am J Prev Med* 57 (6): 749-756. <https://doi.org/10.1016/j.amepre.2019.07.022>.
- <sup>28</sup> Garcia, M. C., M. Faul, G. Massetti, C. C. Thomas, Y. Hong, U. E. Bauer, and M. F. Iademarco. 2017. "Reducing Potentially Excess Deaths from the Five Leading Causes of Death in the Rural United States." *MMWR Surveill Summ* 66 (2): 1-7. <https://doi.org/10.15585/mmwr.ss6602a1>.
- <sup>29</sup> U.S. Department of Agriculture. 2019 September 23. "Rural Employment and Unemployment." <https://www.ers.usda.gov/topics/rural-economy-population/employment-education/rural-employment-and-unemployment/>. (Accessed May 6, 2020).
- <sup>30</sup> U.S. Department of Agriculture. 2020 February 12. "Rural Poverty & Well-Being." <https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/>. (Accessed May 6, 2020).
- <sup>31</sup> "Rural Communities: Age, Income, and Health Status." 2018 November. *Rural Health Research Gateway: 2*. <https://www.ruralhealthresearch.org/assets/2200-8536/rural-communities-age-income-health-status-recap.pdf>. (Accessed May 6, 2020).
- <sup>32</sup> Berchick, Edward R., Jessica C. Barnett, and Rachel D. Upton. 2019 November. *Health Insurance Coverage in the United States: 2018: Current Population Reports. P60-267(RV)*. Washington, DC: US Census Bureau. <https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-267.pdf>.
- <sup>33</sup> MEDPAC. 2019 June. A DATA BOOK: Health Care Spending and the Medicare Program. [http://www.medpac.gov/docs/default-source/data-book/jun19\\_databook\\_entirereport\\_sec.pdf?sfvrsn=0](http://www.medpac.gov/docs/default-source/data-book/jun19_databook_entirereport_sec.pdf?sfvrsn=0).
- <sup>34</sup> Statista. "Distribution of Medicaid enrollment from 2013 to 2018, by enrollment group." <https://www.statista.com/statistics/245368/medicaid-enrollment-distribution-by-group/>. (Accessed May 6, 2020).
- <sup>35</sup> Meit, Michael, Alana Knudson, Tess Gilbert, Amanda Tzy-Chyi Yu, Erin Tanenbaum, Elizabeth Ormson, Shannon TenBroeck, Alycia Bayne, and Shena Popat. 2014 October. *The 2014 Update of the Rural-Urban Chartbook*. <https://ruralhealth.und.edu/projects/health-reform-policy-research-center/pdf/2014-rural-urban-chartbook-update.pdf>. (Accessed May 6, 2020).
- <sup>36</sup> Rural Health Research Center. 2015 June. "Dentist Supply, Dental Care Utilization, and Oral Health Among Rural and Urban U.S. Residents." *Final Report* 135: 13. [http://depts.washington.edu/uwrhrc/uploads/RHRC\\_FR135\\_Doescher.pdf](http://depts.washington.edu/uwrhrc/uploads/RHRC_FR135_Doescher.pdf). (Accessed May 6, 2020).
- <sup>37</sup> Rural Health Research Center. 2016 September. "Supply and Distribution of the Behavioral Health Workforce in Rural America." *Data Brief* 160: 6. [https://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/09/RHRC\\_DB160\\_Larson.pdf](https://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/09/RHRC_DB160_Larson.pdf). (Accessed May 6, 2020).
- <sup>38</sup> Kirby, J. B., S. H. Zuvekas, A. E. Borsky, and Q. Ngo-Metzger. 2019. "Rural Residents With Mental Health Needs Have Fewer Care Visits Than Urban Counterparts." *Health Aff (Millwood)* 38 (12): 2057-2060. <https://doi.org/10.1377/hlthaff.2019.00369>.
- <sup>39</sup> Agency for Healthcare Research and Quality. 2017 November. *National Healthcare Quality and Disparities Report. Chartbook On Rural Health Care*. Rockville, MD: Agency for

---

Healthcare Research and Quality.

<https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/chartbooks/qdr-ruralhealthchartbook-update.pdf>. (Accessed May 6, 2020).

<sup>40</sup> Ivey-Stephenson, A. Z., A. E. Crosby, S. P. D. Jack, T. Haileyesus, and M. J. Kresnow-Sedacca. 2017. "Suicide Trends Among and Within Urbanization Levels by Sex, Race/Ethnicity, Age Group, and Mechanism of Death - United States, 2001-2015." *MMWR Surveill Summ* 66 (18): 1-16. <https://doi.org/10.15585/mmwr.ss6618a1>.

<sup>41</sup> Peterson, C., A. Sussell, J. Li, P. K. Schumacher, K. Yeoman, and D. M. Stone. 2020. "Suicide Rates by Industry and Occupation - National Violent Death Reporting System, 32 States, 2016." *MMWR Morb Mortal Wkly Rep* 69 (3): 57-62. <https://doi.org/10.15585/mmwr.mm6903a1>.

<sup>42</sup> Mack, K. A., C. M. Jones, and M. F. Ballesteros. 2017. "Illicit Drug Use, Illicit Drug Use Disorders, and Drug Overdose Deaths in Metropolitan and Nonmetropolitan Areas - United States." *MMWR Surveill Summ* 66 (19): 1-12. <https://doi.org/10.15585/mmwr.ss6619a1>.

<sup>43</sup> Johnston, K. J., H. Wen, and K. E. Joynt Maddox. 2019. "Lack Of Access To Specialists Associated With Mortality And Preventable Hospitalizations Of Rural Medicare Beneficiaries." *Health Aff (Millwood)* 38 (12): 1993-2002. <https://doi.org/10.1377/hlthaff.2019.00838>.

<sup>44</sup> Spencer, J. C., S. B. Wheeler, J. S. Rotter, and G. M. Holmes. 2018. "Decomposing Mortality Disparities in Urban and Rural U.S. Counties." *Health Serv Res* 53 (6): 4310-4331. <https://doi.org/10.1111/1475-6773.12982>.

<sup>45</sup> "QuickStats: Infant Mortality Rates For Metro and Nonmetro Counties,\* by Race and Hispanic Origin - National Vital Statistics System, United States, 2017." 2020. *MMWR Morb Mortal Wkly Rep* 69 (3): 95. <https://doi.org/10.15585/mmwr.mm6903a6>.

<sup>46</sup> Kozhimannil, K. B., J. D. Interrante, C. Henning-Smith, and L. K. Admon. 2019. "Rural-Urban Differences In Severe Maternal Morbidity And Mortality In The US, 2007-15." *Health Aff (Millwood)* 38 (12): 2077-2085. <https://doi.org/10.1377/hlthaff.2019.00805>.

<sup>47</sup> Hung, Peiyin, Carrie E. Henning-Smith, Michelle M. Casey, and Katy B. Kozhimannil. 2017. "Access To Obstetric Services In Rural Counties Still Declining, With 9 Percent Losing Services, 2004-14." *Health Affairs* 36 (9): 1663-1671. <https://doi.org/10.1377/hlthaff.2017.0338>.

<sup>48</sup> Hung, P, K Kozhimannil, C Henning-Smith, and M Casey. 2017 April "Closure of Hospital Obstetric Services Disproportionately Affects Less-Populated Rural Counties." *University of Minnesota Rural Health Research Center: Policy Brief*: 4. <https://3pea7g1qp8f3t9oee3z3npx1-wpengine.netdna-ssl.com/wp-content/uploads/2017/04/UMRHRCOBClosuresPolicyBrief5.2.19.pdf>. (Accessed May 6, 2020).

<sup>49</sup> Thomas, S. R., G. M. Holmes, and G. H. Pink. 2016. "To What Extent do Community Characteristics Explain Differences in Closure among Financially Distressed Rural Hospitals?" *J Health Care Poor Underserved* 27 (4a): 194-203. <https://doi.org/10.1353/hpu.2016.0176>.

<sup>50</sup> James, C. V., R. Moonesinghe, S. M. Wilson-Frederick, J. E. Hall, A. Penman-Aguilar, and K. Bouye. 2017. "Racial/Ethnic Health Disparities Among Rural Adults - United States, 2012-2015." *MMWR Surveill Summ* 66 (23): 1-9. <https://doi.org/10.15585/mmwr.ss6623a1>.

<sup>51</sup> Health Resources and Services Administration, Federal Office of Rural Health Policy 2019 unpublished analysis. "Data Downloads. Area Health Resources Files." <https://data.hrsa.gov/data/download#AHRF>.

<sup>52</sup> National Center for Health Workforce Analysis, Health Resources and Services Administration. 2014. *Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas*. <https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/nchwafactsheet.pdf>. (Accessed May 7, 2020).



- 
- <sup>53</sup> Rural Health Research Center. 2015 June. “Dentist Supply, Dental Care Utilization, and Oral Health Among Rural and Urban U.S. Residents.” *Final Report* 135: 13. [http://depts.washington.edu/uwrhrc/uploads/RHRC\\_FR135\\_Doescher.pdf](http://depts.washington.edu/uwrhrc/uploads/RHRC_FR135_Doescher.pdf). (Accessed May 6, 2020).
- <sup>54</sup> Rural Health Research Center. 2016 September. “Supply and Distribution of the Behavioral Health Workforce in Rural America.” *Data Brief* 160: 6. [https://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/09/RHRC\\_DB160\\_Larson.pdf](https://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/09/RHRC_DB160_Larson.pdf). (Accessed May 6, 2020).
- <sup>55</sup> Health Resources and Services Administration. “National Health Service Corps Builds Healthy Communities: 2019.” <https://bhw.hrsa.gov/sites/default/files/bhw/loans-scholarships/bhw-nhsc-infographic.pdf>. (Accessed May 6, 2020).
- <sup>56</sup> Health Resources and Services Administration. “Data Downloads. Scholarships and Loans.” <https://data.hrsa.gov/data/download?data=SCH#SCH>. (Accessed May 6, 2020).
- <sup>57</sup> Medicare Learning Network. 2019 September. *Federally Qualified Health Center* <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/fqhcfactsheet.pdf>. (Accessed May 6, 2020).
- <sup>58</sup> Medicare Learning Network. 2019 May. *Rural Health Clinic* <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/RuralHlthClinfactsht.pdf>. (Accessed May 6, 2020).
- <sup>59</sup> Health Resources and Services Administration. 2018. “HRSA Programs Serve Rural Communities [Infographic]”. <https://www.hrsa.gov/sites/default/files/hrsa/ruralhealth/Infographics/HRSA-Rural-Health-infographic-2018.pdf>. (Accessed May 6, 2020).
- <sup>60</sup> Rural Health Information Hub. 2019 August 20. “Critical Access Hospitals (CAHs).” <https://www.ruralhealthinfo.org/topics/critical-access-hospitals>. (Accessed May 6, 2020).
- <sup>61</sup> Thomas, Sharita R., Mark Holmes, and George H. Pink. 2017 November. “Differences in Community Characteristics of Sole Community Hospitals.” *NC Rural Health Research Program: Findings Brief*: 6. [https://www.shepscenter.unc.edu/wp-content/uploads/dlm\\_uploads/2017/11/SCHs\\_Differences\\_in\\_Community\\_Characteristics.pdf](https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2017/11/SCHs_Differences_in_Community_Characteristics.pdf). (Accessed May 6, 2020).
- <sup>62</sup> U.S. Government Accountability Office. 2020 February. *Medicare: Information on Medicare-Dependent Hospitals*. Washington, DC: U.S. Government Accountability Office. <https://www.gao.gov/assets/710/704992.pdf>. (Accessed May 7, 2020).
- <sup>63</sup> Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill. 2014. “170 Rural Hospital Closures: January 2005 – Present (128 since 2010).” <https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/>. (Accessed May 6, 2020).
- <sup>64</sup> Thomas, Sharita R., George H. Pink, and Kristin Reiter. 2019 April “Trends in Risk of Financial Distress among Rural Hospitals from 2015 to 2019.” *NC Rural Health Research Program: Findings Brief*. [https://www.shepscenter.unc.edu/wp-content/uploads/dlm\\_uploads/2019/04/FDI-Trends-1.pdf](https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2019/04/FDI-Trends-1.pdf). (Accessed May 6, 2020).
- <sup>65</sup> “Rural Obstetric Services: Access, Workforce, and Impact.” 2019 April. *Rural Health Research Gateway*: 2. <https://www.ruralhealthresearch.org/assets/2792-10798/rural-ob-services.pdf>. (Accessed May 6, 2020).
- <sup>66</sup> Hung, Peiyin, Jan M. Eberth, Elizabeth Crouch, Janice C. Probst. 2020. “Payer Mix of Inpatient Days at Rural and Urban Hospitals.” Policy Brief Working Paper. Rural and Minority

---

Health Research Center, University of South Carolina, April 10, 2020.

<sup>67</sup> Medicare Learning Network. Home Health Rural Add-on Payments Based on County of Residence. 2018 November 16; <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/MM10782.pdf>. (Accessed May 13, 2020).

<sup>68</sup> Medicare Learning Network. Ambulance Fee Schedule and Medicare Transports. 2019 July: <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/Medicare-Ambulance-Transports-Booklet-ICN903194.pdf>. (Accessed May 13, 2020).

<sup>69</sup> Meit, M, A Knudson, I Dickman, A Brown, N Hernandez, and J Kronstadt. 2013 March. An Examination of Public Health Financing in the United States. <https://www.norc.org/PDFs/PH%20Financing%20Report%20-%20Final.pdf>.

<sup>70</sup> Meit, M. 2017 July 11. “GS1 - Opening General Session: Bridging Clinical Medicine and Population Health.” NACCHO Annual 2017, Pittsburgh, PA. <https://www.eventscribe.com/2017/NACCHOAnnual/agenda.asp>. (Accessed May 6, 2020).

<sup>71</sup> MEDPAC. 2016 October. *Ambulance Services Payment System* [http://www.medpac.gov/docs/default-source/payment-basics/medpac\\_payment\\_basics\\_16\\_ambulance\\_final.pdf?sfvrsn=0](http://www.medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_16_ambulance_final.pdf?sfvrsn=0). (Accessed May 6, 2020).

<sup>72</sup> Cromartie, J. 2018. *Rural America at a Glance, 2018 Edition*: U.S. Department of Agriculture. <https://www.ers.usda.gov/publications/pub-details/?pubid=90555>. (Accessed May 6, 2020).

<sup>73</sup> Coburn, A. F., E. C. Ziller, N. Paluso, D. Thayer, and J. A. Talbot. 2019. “Long-Term Services and Supports Use Among Older Medicare Beneficiaries in Rural and Urban Areas.” *Res Aging*: 164027518824117. <https://doi.org/10.1177/0164027518824117>.

<sup>74</sup> Henning-Smith, Carrie, Alexandra Ecklund, Ira Moscovice, and Katy Kozhimannil. 2018 August. “Gender Differences in Social Isolation and Social Support among Rural Residents “ *University of Minnesota Rural Health Research Center: Policy Brief: 5*. [http://rhrc.umn.edu/wp-content/files\\_mf/1532458325UMNpolicybriefsocialisolationgenderdifferences.pdf](http://rhrc.umn.edu/wp-content/files_mf/1532458325UMNpolicybriefsocialisolationgenderdifferences.pdf). (Accessed May 6, 2020).

<sup>75</sup> Rural Health Information Hub. “Barriers to Accessing Care for Rural People with Disabilities.” Last Modified May 2012. <https://www.ruralhealthinfo.org/toolkits/disabilities/1/barriers>. (Accessed May 6, 2020).

<sup>76</sup> Health Resources and Services Administration. Telehealth. <https://www.telehealth.hhs.gov/>. (Accessed May 13, 2020).

<sup>77</sup> Barnett, M. L., K. N. Ray, J. Souza, and A. Mehrotra. 2018. “Trends in Telemedicine Use in a Large Commercially Insured Population, 2005-2017.” *JAMA* 320 (20): 2147-2149. <https://doi.org/10.1001/jama.2018.12354>.

<sup>78</sup> Centers for Medicare and Medicaid Services. 2018 November 15. “Information on Medicare Telehealth”: 47. <https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Information-on-Medicare-Telehealth-Report.pdf>. (Accessed May 6, 2020).

<sup>79</sup> Talbot, J. A., A. R. Burgess, D. Thayer, au, N. Paluso, and A. F. Coburn. 2019. “Patterns of Telehealth Use Among Rural Medicaid Beneficiaries.” *J Rural Health* 35 (3): 298-307. <https://doi.org/10.1111/jrh.12324>.

<sup>80</sup> Centers for Medicare and Medicaid Services. 2020 March 24. *FAQs on Availability and Usage of Telehealth Services through Private Health Insurance Coverage in Response to Coronavirus Disease 2019 (COVID-19)* <https://www.cms.gov/files/document/faqs-telehealth-covid-19.pdf>.

---

(Accessed June 9, 2020).

<sup>81</sup> National Association of the Deaf. 2020 April 17. "COVID-19: Guidelines for Healthcare Providers – Video-Based Telehealth Accessibility for Deaf and Hard of Hearing Patients." <https://www.nad.org/covid19-telehealth-access-for-providers/>. (Accessed June 11).

<sup>82</sup> Agency for Healthcare Research and Quality. 2016 June 30. "Technical Brief: Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews." <https://effectivehealthcare.ahrq.gov/products/telehealth/technical-brief>. (Accessed May 6, 2020).

<sup>83</sup> Perrin, Andrew. 2019 May 31. "Digital Gap Between Rural and Nonrural America Persists." *Pew Research Fact Tank*. <https://www.pewresearch.org/fact-tank/2019/05/31/digital-gap-between-rural-and-nonrural-america-persists/>. (Accessed May 6, 2020).

<sup>84</sup> "Quality of Care in Rural Hospitals." 2019 January. *Rural Health Research Gateway*: 2. <https://www.ruralhealthresearch.org/assets/2645-9942/quality-of-care-in-rural-hospitals-recap.pdf>. (Accessed May 6, 2020).

<sup>85</sup> Joynt, K. E., E. J. Orav, and A. K. Jha. 2013. "Mortality Rates for Medicare Beneficiaries Admitted to Critical Access and Non-Critical Access Hospitals, 2002-2010." *JAMA* 309 (13): 1379-87. <https://doi.org/10.1001/jama.2013.2366>.

<sup>86</sup> Ibrahim, A. M., T. G. Hughes, J. R. Thumma, and J. B. Dimick. 2016. "Association of Hospital Critical Access Status With Surgical Outcomes and Expenditures Among Medicare Beneficiaries." *JAMA* 315 (19): 2095-103. <https://doi.org/10.1001/jama.2016.5618>.

<sup>87</sup> "Quality of Care in Rural Hospitals." 2019 January. *Rural Health Research Gateway*: 2. <https://www.ruralhealthresearch.org/assets/2645-9942/quality-of-care-in-rural-hospitals-recap.pdf>. (Accessed May 6, 2020).

<sup>88</sup> Moscovice, I., M. Casey, and P. Hung. 2015 October 25. "Slide 30: Which hospitals were less likely to get penalized for FY 2013 – 2015?" *Impact of CMS Readmission Reduction and Value-Based Purchasing Programs on Rural PPS Hospitals*. Rural Health Research and Policy Centers & University of Minnesota. <https://www.ruralhealthresearch.org/assets/1177-4815/102015-value-based-spending-webinar-ppt.pdf> (Accessed May 13, 2020).

<sup>89</sup> Hung, Peiyin, Michelle Casey, and Ira Moscovice. 2015 October. "Which Rural and Urban Hospitals Have Received Readmission Penalties Over Time?" *University of Minnesota Rural Health Research Center: Policy Brief*: 6. <https://www.ruralhealthresearch.org/publications/987>. (Accessed May 6, 2020).

<sup>90</sup> Centers for Medicare and Medicaid Services. 2018. *2017 Quality Payment Program Reporting Experience*. <https://qpp-cm-prod-content.s3.amazonaws.com/uploads/491/2017%20QPP%20Experience%20Report.pdf>. (Accessed May 7, 2020).

<sup>91</sup> Centers for Medicare and Medicaid Services. 2018. *2017 Quality Payment Program Reporting Experience*. <https://qpp-cm-prod-content.s3.amazonaws.com/uploads/491/2017%20QPP%20Experience%20Report.pdf>. (Accessed May 7, 2020).

<sup>92</sup> Trombley, M. J., B. Fout, S. Brodsky, J. M. McWilliams, D. J. Nyweide, and B. Morefield. 2019. "Early Effects of an Accountable Care Organization Model for Underserved Areas." *N Engl J Med* 381 (6): 543-551. <https://doi.org/10.1056/NEJMsa1816660>.

<sup>93</sup> Mueller, Keith J., Charlie Alfero, Andrew F. Coburn, Jennifer P. Lundblad, A. Clinton MacKinney, Timothy D. McBride, and Paula Weigel. 2018 December. *Assessing the Unintended Consequences of Health Policy on Rural Populations and Places*: Rural Policy Research Institute. <http://www.rupri.org/wp-content/uploads/Evaluating-the-Impact-of-Policy-Changes->

---

[on-Rural-Populations.pdf](#). (Accessed May 7, 2020).

<sup>94</sup> U.S. Department of Veterans Affairs. “Rural Veteran Health Care Challenges.”

<https://www.ruralhealth.va.gov/aboutus/ruralvets.asp>. (Accessed May 6, 2020).

<sup>95</sup> Yaemsiri, S., J. M. Alfier, E. Moy, L. M. Rossen, B. Bastian, J. Bolin, A. O. Ferdinand, T. Callaghan, and M. Heron. 2019. “Healthy People 2020: Rural Areas Lag In Achieving Targets For Major Causes Of Death.” *Health Aff (Millwood)* 38 (12): 2027-2031.

<https://doi.org/10.1377/hlthaff.2019.00915>.

<sup>96</sup> U.S. Department of Health and Human Services. “Healthy People 2020: Foundation Health Measures Archive.” <https://www.healthypeople.gov/2020/About-Healthy-People/Foundation-Health-Measures2020/About-Healthy-People/Foundation-Health-Measures/Archive>. (Accessed May 6, 2020).

<sup>97</sup> Garcia, M. C., M. Faul, G. Massetti, C. C. Thomas, Y. Hong, U. E. Bauer, and M. F. Iademarco. 2017. “Reducing Potentially Excess Deaths from the Five Leading Causes of Death in the Rural United States.” *MMWR Surveill Summ* 66 (2): 1-7.

<https://doi.org/10.15585/mmwr.ss6602a1>.

<sup>98</sup> Garcia, M. C., M. Faul, G. Massetti, C. C. Thomas, Y. Hong, U. E. Bauer, and M. F. Iademarco. 2017. “Reducing Potentially Excess Deaths from the Five Leading Causes of Death in the Rural United States.” *MMWR Surveill Summ* 66 (2): 1-7.

<https://doi.org/10.15585/mmwr.ss6602a1>.

<sup>99</sup> Appalachian Regional Commission. “The Appalachian Region.”

[https://www.arc.gov/appalachian\\_region/TheAppalachianRegion.asp](https://www.arc.gov/appalachian_region/TheAppalachianRegion.asp). (Accessed May 6, 2020).

<sup>100</sup> Cronin, K. A., A. J. Lake, S. Scott, R. L. Sherman, A. M. Noone, N. Howlader, S. J. Henley, R. N. Anderson, A. U. Firth, J. Ma, B. A. Kohler, and A. Jemal. 2018. “Annual Report to the Nation on the Status of Cancer, part I: National cancer statistics.” *Cancer* 124 (13): 2785-2800.

<https://doi.org/10.1002/cncr.31551>.

<sup>101</sup> Broder, S. 1991. “Progress and challenges in the National Cancer Program.” In *Origins of human cancer: A comprehensive review*, edited by J Brugge, T Curran, E Harlow and F McCormick, 27-33. Plainfield, NY: Cold Spring Harbor Laboratory Press.

<sup>102</sup> Boscoe, F. P., C. J. Johnson, R. L. Sherman, D. G. Stinchcomb, G. Lin, and K. A. Henry. 2014. “The relationship Between Area Poverty Rate and Site-Specific Cancer Incidence in the United States.” *Cancer* 120 (14): 2191-8. <https://doi.org/10.1002/cncr.28632>.

<sup>103</sup> Ward, E., A. Jemal, V. Cokkinides, G. K. Singh, C. Cardinez, A. Ghafoor, and M. Thun. 2004. “Cancer disparities by race/ethnicity and socioeconomic status.” *CA Cancer J Clin* 54 (2): 78-93. <https://doi.org/10.3322/canjclin.54.2.78>.

<sup>104</sup> National Academies of Sciences, Engineering, and Medicine. 2020. *Birth Settings in America: Outcomes, Quality, Access, and Choice*. Edited by Susan C. Scrimshaw and Emily P. Backes. Washington, DC: The National Academies Press.