Raising Awareness and Seeking Solutions to the Opioid Epidemic's Impact on Rural Older Adults

Prepared for Grantmakers In Aging (GIA) by

William F. Benson and Nancy Aldrich of Health Benefits ABCs

FRAMING THE ISSUE

There is an older adult opioid crisis quietly spreading in rural communities that could seriously stress if not overwhelm aging services, adult protective services, health care providers, emergency response teams, and other community services in the future.

Even as public health officials acknowledge the nationwide opioid epidemic is affecting Americans across all socio-demographic lines, little attention is being paid to the impact of pain medication (opioids) misuse on rural older adults.

Adult protective services data is showing an increase in elder abuse in recent years. Some elder advocates and law enforcement believe the growing opioid epidemic is contributing to elder abuse. Unfortunately, adult protective services data collection currently does not identify whether or not opioids are involved in abuse allegations and cases.

Rural grandparents are more likely than their urban counterparts to be raising a grandchild because their adult child is addicted to opioids. While often happy to be closely involved with their grandchildren, these older adults face unique social, financial, physical and mental health challenges, including raising children with physical or cognitive health problems resulting from their parents' opioid abuse.

Just as alarming, a growing number of rural older adults themselves are ending up in the hospital or dying from opioid abuse. Adults ages 45 and older comprise 43 percent of opioid deaths in rural counties, where people are twice as likely to die from opioids as their urban counterparts. In West Virginia, one of the states hardest-hit by the opioid epidemic, opioid-related hospitalizations have more than doubled over 10 years for adults ages 65 and older and tripled among adults ages 45-64 years. Yet, few rural older adults get into treatment programs, partly due to their own reluctance and the stigma surrounding addiction, but also largely due to the unavailability of treatment programs in rural areas. Only 10 percent of opioid treatment resources nationwide are located in rural areas.

As middle-age and older adults continue to age in their communities, the aging services and adult protective services networks are likely to be dealing with more complex clients with opioid-related issues that will strain these fragile systems that already have fewer resources than they need.

The combination of the growing rural opioid epidemic and the aging of the population will also place enormous pressure on health care systems, emergency response services, law enforcement, and other community services. Preventive action now could help preserve essential aging services dollars at the community level that might be diverted to broader opioid responses.

No doubt some rural communities are already developing home-grown ideas for addressing the impact of the opioid epidemic on their older adults. But work needs to be done to create the gold-star evidence-based programs with solid achievements of preventing and treating opioid misuse among rural older adults. Once those program successes percolate up to the attention of the research community and policymakers, more funding may become available for rural programs.

In the meantime, communities that have not yet considered the impact of the opioid epidemic on their older adults need to work now to find solutions to protect them from opioid misuse. This is especially important in rural areas, where the sense of community is so important to its members.

A rural community's call to action could center on forming a local coalition to assess the problem, and develop and coordinate the community response. A critical goal is to ensure both prevention and treatment services are available for older rural adults who are at risk of or already misusing opioids, or are being abused by addicted family members or friends. Such coalitions can encourage crea-

tion of an integrated network of aging, behavioral health and healthcare services.

Essential community activities include ensuring linkages to adult protective services for any older adult who is self-neglecting or being abused; treating older adults who are misusing pain medication or using illegal opioids such as heroin or fentanyl; providing education and support for patients who take opioids due to chronic pain to ensure they do not become addicted; and expanding aging services and other community endeavors to support grandparents raising grandchildren.

Buy-in from other community entities is essential – including local government agencies, law enforcement, health-related organizations, senior housing providers, and churches. In rural areas, important educational roles can be played by radio and television stations, and community colleges.

Education. A key part of any community action is public awareness efforts to ensure people of all ages understand the dangers of opioid misuse and sharing drugs. In addition, prescribers, pharmacists and law enforcement need to determine if their local opioid market is oversupplied, which can occur either via pharmaceutical marketing patterns or illicit drugs.

Prescriber education must preserve the rights of older adults living with pain to obtain prescription opioids when medically warranted, while ensuring prescribers consider the risks of opioid misuse by their older patients. Rural physicians tend to prescribe pain medications because other alternatives (such as physical therapy) are less available in rural areas.

More primary care physicians, who are the main practitioners in rural America, need federal approval to prescribe a drug that treats opioid use disorder.

Education efforts must also involve health care provider and emergency response education about the unique needs of older rural adults exposed to opioids. Communities need to ensure that training is in place on how to identify, assess and treat older adults who are misusing opioids, or are victims of a misuser.

Community-Specific. Because there is a wide variation in the characteristics of each rural area, experts say each community needs to develop its own unique approach, based on its assessment of the problem, needs and solutions. Guidance can be obtained from research identifying the unique needs of older adults and the devastating impact of opioids on them, as well as from prevention and treatment programs that have been set up in a few rural areas.

Project Lazarus in North Carolina and several other states uses a public-health prevention and treatment approach. Senior Hope Counseling, Inc. of Albany, N.Y., which is one of the few senior-only free-standing addiction treatment centers in the nation, focuses on small, age-specific treatment groups, led by seasoned geriatric addictions clinicians. The Hazelden Betty Ford Foundation, one of the largest nonprofit addiction treatment organizations, has programs focused on older adults that provide a continuing care plan.

Time for Action. The good news is that awareness of the opioid epidemic has made state/local governments, health care providers, emergency responders, pharmacists, insurers, community groups and patient advocates ready to play a role in solving this problem.

Now the focus needs to turn to protecting rural older adults from the devastating impact of the opioid epidemic.

"Ongoing prescription opioid misuse and heroin abuse pose a threat to the future of rural America."

— National Advisory Committee on Rural Health and Human Services

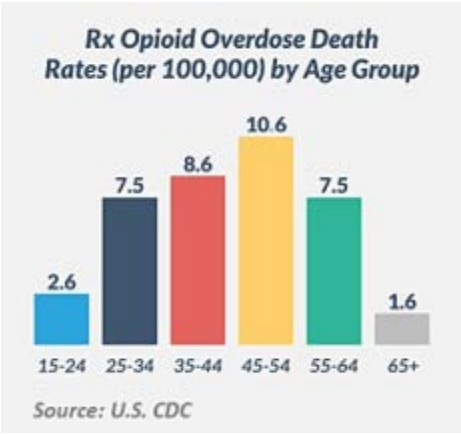
Opioid Epidemic Facts

- ✓ Opioid overdoses kill more than 33,000 people each year.
- ✓ 44 percent of the 4,578 annual rural opioid deaths occur among adults ages 45 and older (3.7 percent of these deaths are adults ages 65 and older).
- ✓ People in rural counties are nearly twice as likely to overdose on prescription painkillers as people in big cities.
- ✓ Among adults ages 65-74, the opioid-related death rate in rural areas is 3.2 per 100,000 people, compared to 14.6 per 100,000 for adults ages 45-64, and 9.9 per 100,000 for all rural residents. (The nationwide opioid-related death rate is 10.6 per 100,000.)
- ✓ Opioid-related hospitalizations more than doubled over 10 years for adults ages 65 and older and tripled among adults ages 45-64 years in largely rural West Virginia.[1]
- ✓ Only 10 percent of opioid treatment resources nationwide are located in rural areas.
- ✓ Only 11 percent of patients seeking addiction treatment in rural areas are able to receive opioid-addiction treatment medications.

INTRODUCTION

Older adults in rural areas face a double jeopardy of being more likely than their urban counterparts to develop an opioid addiction, but being less likely to find treatment. Rural grandparents also are more likely than their urban counterparts to be raising a grandchild because the adult child is misusing opioids. Or the older adult may be the victim of elder abuse by a family member with an opioid addiction. Thus the nationwide opioid epidemic is affecting rural older adults in numerous ways.

Opioids are narcotics prescribed to manage pain from surgery, injury and illness. They include prescription painkillers such as oxycodone (brand name OxyContin), as well as heroin and illicit forms of the pain medicine fentanyl. Opioids can create a euphoric effect when they combine with receptors in the brain. Prolonged use of increasingly higher doses of opioids changes the brain so that it needs the drug to function. A key aspect of recovery from opioid abuse is the process of reversing, to the extent possible, the brain changes from opioid addiction.



Once considered a problem of the inner city, opioid drug misuse has been shifting to rural areas, most notably rural Appalachia, New England and the Midwest. The six states with the highest drug overdose rates in 2015 were West Virginia, New Hampshire, Kentucky, Ohio, Rhode Island and Pennsylvania, according to the U.S. Centers for Disease Control and Prevention (CDC).

[1] To view data for your state, go to https://www.hcup-us.ahrq.gov/, select Fast Stats, select "Trends in Opioid-Related Hospital Use," enter your state, select "age" for characteristic and choose Inpatient Stays or ED Visits, and click on Refresh. Then click on "Show Underlying Data Tables."

Who is likely to misuse opioids? People in rural counties are nearly twice as likely to overdose on prescription painkillers as people in big cities. Whites and American Indian or Alaska Natives are more likely to overdose on prescription painkillers than other groups. Many more men than women die of overdoses from prescription painkillers, although the death rate among women is rapidly rising in recent years. (Female overdose deaths rose 400 percent since 1999.) Middle-age adults have the highest prescription painkiller overdose rates.

While not the largest group of people misusing opioids, older adults (65+) are showing sharp upward trends (by 56 percent) in mortality and hospitalization rates. When they go to the emergency department for opioid misuse, they are more likely to be hospitalized than younger adults due to their increasing frailty.

Nationwide Epidemic. An estimated 2 million Americans have an opioid use disorder and another 467,000 are using heroin, according to the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA). Since 2002, SAMHSA data show a steady increase from 2.7 percent to 6.0 percent in illicit drug use by adults ages 50-64, and from 1.1 percent to 3.9 percent among those ages 60-64. This has been accompanied by an increase in treatment admissions for and rising deaths due to drug overdoses in this age group. In addition, the higher frequency of prescription and illicit drug use seen in middle-age persons could portend higher misuse rates among the oldest groups as these individuals age, according to the Preventing Prescription Abuse in the Workplace Technical Assistance Center (funded by SAMHSA). Oxycodone contributed to more deaths nationwide in 2010-2012, heroin contributed to more deaths in 2012-2014, and fentanyl deaths are currently soaring.

In addition to the devastating mortality, societal costs of opioid misuse may be as high as $79 billion a year. Researchers estimate opioid-related emergency department, hospital and treatment costs at $20 billion to $25 billion annually. Emergency department and hospital charges involving opioid pain medications average about $25,275 per patient. There are also workplace productivity losses and criminal justice costs.

But the cost of chronic pain is also high. A National Institutes of Health panel found that “the societal costs of chronic pain are estimated at between $560 and $630 billion per year.” The medical community has long debated the appropriate balance between providing patients with safe and effective pain treatments, and not overprescribing opioids.

Rural Misuse. Data on rural opioid misuse is sparse and not well analyzed due to small sample sizes, which make conclusions difficult. What data there is, and anecdotal information from around the country, indicate that rural older adults struggle with opioid misuse to the same degree—if not more than—seniors nationwide. More importantly, most rural older adults do not have access to the treatment they need.

Like all aging adults, rural older adults are vulnerable to medication abuse because they use more prescription and over-the-counter medications than other age groups, and may develop increased medication sensitivity as they age. They also have a “higher risk of accidental misuse or abuse” of opioids due to conditions like pain, sleep disorders and insomnia, and anxiety that commonly occur in this population, according to the U.S. Surgeon General. Rural dwellers face a combination of unique economic and social characteristics that make residents prone to drug misuse and, for many reasons, there is a surplus of opioid medications in many rural areas.

This document examines the problem of opioid misuse by older rural elders, looks at a few prevention and treatment programs, and identifies areas for more research.

HOW THE OPIOID CRISIS DIFFERS FOR RURAL OLDER ADULTS

“The opioid crisis in rural communities is incredibly complex and one that will not be solved easily,” the National Rural Health Association has concluded. This is particularly concerning in rural areas where access to illegal opioids is high but access to treatment services is low.

The three common themes for rural aging that contribute to opioid misuse among older adults are 1) a scarcity of resources, 2) valuing neighbors and family, and a 3) high prevalence of drug abuse, according to a survey of geriatric social workers in rural southwestern Ohio, conducted by University of Kentucky researchers.

Research shows that economic deprivation and other components of a stressful environment place individuals at risk for drug abuse. Rising opioid misuse among older adults in rural communities has been attributed to the following reasons:

- **Demographic**. Rural populations tend to be older than in urban areas. More than 16 percent of the nation’s 48 million rural Americans are ages 65+. Rural areas also have a higher proportion of those ages 85 and older, who are more likely to have chronic diseases and disabilities.

- **Economic** (low income, unemployment and substandard housing). About 9.9 percent of rural older adults (ages 65+) live in poverty, compared to 8.8 percent of urban elderly, according to 2015 data from the USDA Economic Research Service. Rural poverty rates are significantly higher among blacks (36.9 percent in poverty), American Indians (33.0 percent poverty) and Hispanics (27.5 percent poverty). Some rural older adults with low incomes are tempted to sell their prescription opioids for additional income, or to obtain opioids illegally when they can no longer afford their prescriptions.

- **Unemployment.** Research shows the unemployment rate in rural areas consistently exceeds the national average and, combined with poverty and limited educational opportunities, creates a cycle of socioeconomic depression.

- **Education.** Health literacy is a big issue in opioid misuse, several rural spokespersons said. “Health literacy covers how to properly use medications and when to discard them,” explained Bethany Reynolds, director of the Delta Regional Partnership, a Federally Qualified Health Center headquartered in Ellington, Mo. She noted that many patients in her area of Missouri only have a third-grade education. A Community Health Worker evidence-based model (https://www.ruralhealthinfo.org/community-health/community-health-workers) can improve rural patients’ health literacy and understanding of the disease process, prevention and medication literacy, she said.

  “Opioid misuse by older adults is very common in this region, largely due to poor health literacy and misunderstanding of the medication itself rather than a blatant desire to abuse,” explained Ashley Merritt, Pharm.D., with Parkland Health Mart Pharmacy in rural Ironton, Mo. “I would say 20-30 percent of my elderly patients don't take their pain medication correctly and run out early as a result. They also have very little understanding of serious side effects like respiratory depression and potential signs of an overdose,” Merritt added.

- **Social.** Rural older adults live in close-knit families in which some tend to accept self-medication and drug sharing, yet place a stigma on “addiction” or treatment for drug abuse.

- **Health conditions.** Older adults in rural areas are prone to more chronic pain, depression and social isolation.

There is also a lack of outreach and treatment resources available in rural communities.

Rural Pain. Addressing acute pain is more difficult in rural areas—where there is already a problem with access to health care—and chronic pain issues are likely to be higher due to the physical nature of rural jobs, said Myra Christopher, director of the Pain Action Alliance to Implement a National Strategy (PAINS) and the Kathleen M. Foley Chair in Pain and Palliative Care at the Center for Practical Bioethics. For a patient with chronic pain who has difficulty getting to a doctor’s office or pharmacy due to distance or a lack of transportation or severe pain, “it is particularly difficult for prescribers to manage the medications so they are safe,” she explained.

Prescribing and Marketing. Half of all opioid overdose deaths involved a prescription drug (the other deaths were due to illegal drugs). The availability of prescription opioids in rural areas is driven by several factors, including:

1) Past medical guidelines to improve the under treatment of chronic pain.

2) The availability of prescription drug insurance (Part D insurance) for Medicare beneficiaries (launched in 2006), which has been tied to an increase in opioid use by Medicare beneficiaries.

3) Aggressive marketing by pharmaceutical companies and distributors to promote the use of prescription opioids in rural areas.

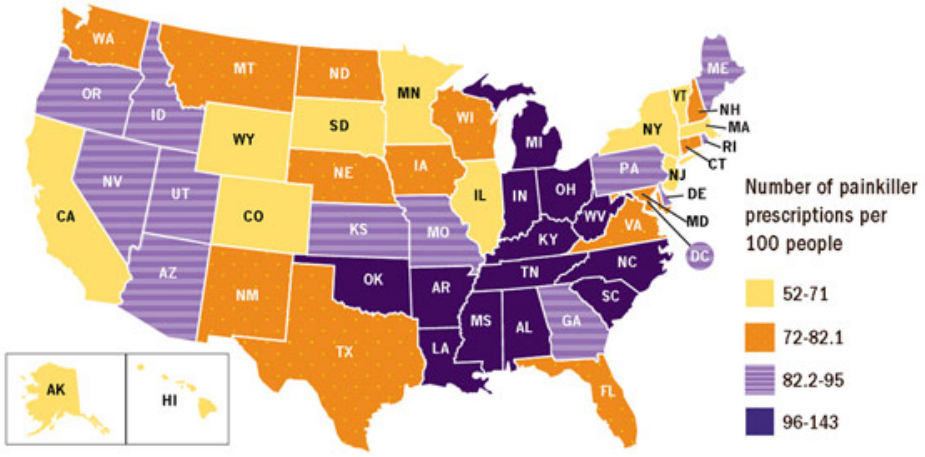
While there will always be illegal “pill mill” prescribers that need to be shut down, most physicians have been educated on the complexities of pain and prescribing opioids for older adults. Mandatory physician use of state-based Prescription Drug Monitoring Programs could help identify errant prescribing patterns, as well as patients who use multiple doctors to obtain opioids. These programs are set up in all states except Missouri, but participation requirements vary by state and not all physicians have taken the time to be trained on using the database. Several states and localities have implemented policies that limit the dosage or quantity of opioids that can be prescribed or dispensed at one time in an effort to prevent over-prescribing by providers, according to the National Academy for State Health Policy.

The U.S. Surgeon General, Medicare, some state Medicaid programs, CDC, medical schools and physician organizations all have prescribing guidance for doctors. Still, much more needs to be done to curb the growth in opioid prescribing that occurred over the last decade. But medication sharing among friends and families, as well as illegal drugs, is also part of the problem.

“Opioid prescribing levels for rural areas are traditionally higher than for urban areas,” explained Fred Brason II, Executive Director and CEO of Project Lazarus, a community-based program in North Carolina focused on reducing fatal overdoses from prescription pain medication. “Due to travel distances and the types of occupations in rural areas, a physician is more likely to

prescribe opioids. In our area, my dairy farmer has to get up tomorrow morning. He doesn't have time to go over to Winston-Salem or down to Charlotte for some kind of invasive treatment. So the opioid keeps them going," Brason explained.

Some states have more painkiller prescriptions per person than others



Source: CDC National Prescription Audit, 2012

"Ten of the highest prescribing states for painkillers are in the South," according to CDC. Per capita sales data also show that states with large rural populations such as West Virginia are among the highest prescribers of opioid analgesics, Columbia University researchers reported in a study of rural-urban differences.

As an example of aggressive marketing, in West Virginia between 2007 and 2012 drug wholesalers "showered the state with 780 million hydrocodone and oxycodone pills, while 1,728 West Virginians fatally overdosed on those two painkillers. … The unfettered shipments amount to 433 pain pills for every man, woman and child in West Virginia," concluded a 2016 analysis of Drug Enforcement Administration drug shipping sales receipts conducted by the *Charleston Gazette-Mail*. At the same time, opioid deaths increased 67 percent in West Virginia.

"Drug sharing, stealing and selling are big problems in rural areas," Brason said. The Project Lazarus opioid overdose prevention program has worked hard on educating patients about keeping their opioids safe and not sharing or selling them. "As a result, nonmedical sources of opioids now come from "suppliers outside our county [Wilkes County, N.C.], not from here," he said.

Although there is no hard data on seniors selling their opioids, anecdotal information indicates some older adults sell their unused opioids. "We have had situations of seniors selling their medications, mainly through their grandkids, to supplement their Social Security," Brason said.

"Doctor shopping" by rural older adults occurs when they seek more opioids than their prescriber will allow. Of the 8.8 million Part D beneficiaries who used prescription opioids in 2011, the U.S. Centers for Medicare & Medicaid Services found about 1.7 million exceeded recommended opioid dosing thresholds. Many of the beneficiaries used multiple prescribers for opioids and/or used multiple pharmacies to fill their prescriptions.

To help detect doctor shopping and other attempts to obtain too many opioids, the Missouri Highlands Health Care program enrolls opioid patients in a prescription drug monitoring system, and can test patients for taking too much of their medication or illegal drugs.

Pharmacist Merritt in Missouri said, “We cannot prove certain patients are diverting opioids [to other people], but there are signs that tip us off such as: consistently requesting early refills, excessive talking or story telling when dropping off a prescription, coming in during the busiest hours (particularly evenings and weekends), multiple prescribers, requesting to pay cash instead of insurance, coming in with others as a group and frequent trips to the ER [emergency room] resulting in additional pain medications. I also think many seniors on a fixed income are tempted to sell some of their medication as a means to generate some additional revenue.”

Minority Groups. While specific rural aging data is not available, national trends can provide a clue about minorities in rural areas. Nationwide, about 1 in 10 American Indian or Alaska Natives ages 12 or older used prescription painkillers for nonmedical reasons in the past year, compared to 1 in 20 whites, and 1 in 30 blacks, according to CDC. “Older Hispanics report lower drug use rates than older non-Hispanic whites,” concludes SAMHSA’s report on drug abuse among Hispanics. Researchers also found non-Hispanic white patients were more likely to be given an opioid for certain conditions during emergency department visits, perhaps partially explaining the higher rate of opioid abuse among whites. More research in this area is needed, especially among rural populations.

Grandfamilies. Another result of the opioid epidemic is more rural grandparents raising their grandchildren when an opioid-addicted parent is unable to do so. Rural households are slightly more likely (8.9 percent of rural households) than urban households (7.4 percent) to report the presence of a grandchild of the householder, according to the U.S. Census Bureau.

More than 2.5 million children are raised by grandparents and other relatives, with no birth parents in the home, according to Generations United. Although exact data is limited, Generations United said that parental substance use is the most common reason that grandparents are raising their grandchildren.

These “grandfamilies” face unique social, financial, physical and mental health challenges, including raising children with physical or cognitive health problems resulting from their parents’ opioid abuse. As a result, the caregiving grandparent may feel socially isolated and depressed, feel concerned about the parent with the substance use disorder and face the stress of raising a child. They also face legal issues such as not having adoption or foster care status to access the child’s medical or education records.

Neglect and Abuse. Substance abuse is believed to be a factor in all types of elder abuse, including physical mistreatment, emotional abuse, financial exploitation, and neglect, according to the National Committee for the Prevention of Elder Abuse. It is also a significant factor in self-neglect. Persons with alcohol or substance abuse problems may view older family members, acquaintances, or strangers as easy targets for financial exploitation.

The Elder Abuse Prevention Project, launched in 2014 by Greater Boston Legal Services, found that older adults were enduring different forms of abuse due to their children or grandchildren’s opioid addiction. “The issues include all forms of financial exploitation; stealing meds and valuables; eviction from public housing; physical, emotional, and verbal abuse,” according to Senior Attorney Betsey Crimmins. Many addicted offspring have moved back home with their elderly parents, contributing to the potential for elder abuse.

Again, solid data is missing, but experts note that elder abuse has climbed as the opioid crisis has worsened. The experts at older adult drug treatment programs we interviewed were unaware of any incidences of elder abuse, but said they have linkages to adult protective services in place should there be a need to refer someone. Anecdotal stories have appeared in newspapers around the country of opioid-addicted children abusing an older parent. *The Boston Globe* reported a spike in elder abuse cases since 2011, but the state aging department's data does not show how many cases involved opioid misuse. Some jurisdictions are offering elder abuse awareness training to emergency responders. Clearly this is an area needing more research to determine how elder abuse reporting can include data on opioid misuse by older adults or their abusers.

BARRIERS TO CARE FOR RURAL OLDER ADULTS

So if older rural adults are more likely than their urban counterparts to develop an opioid addiction, why are they less likely to find treatment in their communities? The overwhelming majority of people who need treatment do not get it. Only 10 percent of opioid prevention and treatment resources nationwide are located in rural areas.

"While barriers [to care] such as workforce shortages, transportation limitations and cultural issues such as stigma are not exclusive to rural areas, they often impact rural individuals in disproportionate or more pronounced ways," the National Academy of State Health Policy concluded in its 2016 rural opioid primer.

In rural areas the lack of access to opioid treatment spans the entire health care system, including un- or under-trained rural emergency response services, and family physicians, as well as non-existent hospitals, emergency departments and substance abuse treatment facilities. An estimated 60 percent of rural Americans live in a mental health professional shortage area, according to the National Rural Health Association. Not only is there a shortage of behavioral health practitioners who might treat opioid misuse, there are no hospitals in many rural areas to treat an overdose. Almost 80 rural hospitals have closed since 2010. In rural Missouri, Reynolds explained that Missouri Highlands Health Care is the only access to medical care for three rural counties, due to the recent closure of the only hospital and emergency room.

Only 11 percent of patients seeking addiction treatment in rural areas are able to receive treatment with medications like methadone, buprenorphine, buprenorphine-naloxone (Suboxone) or naltrexone. These drugs block the effects of narcotics, especially euphoria.

While the rate of opioid overdose deaths is 45 percent higher in rural areas than urban areas, these areas have a disproportionately smaller amount of opioid prevention and treatment resources than urban areas. Therefore, to match the need, the use of the overdose-reversing medication naloxone (Narcan) should be 45 percent higher in rural areas than urban areas, but in fact its use is only 22 percent higher in rural areas, according to the National Advisory Committee on Rural Health and Human Services. This indicates Narcan is not being as widely used in rural areas as it should be.

Rarely are highly trained paramedics the first responders in a rural community, according to the Rural Health Information Hub. In many states, only the highest level of EMS personnel is allowed to give the lifesaving drug naloxone intravenously. Only 13 states allow the most basic

level of EMT personnel to administer naloxone and then it is frequently administered intra-nasally and not by injection, according to the National Academy for State Health Policy.

More primary care physicians, who are the main practitioners in rural America, need to apply for and receive a waiver from the Drug Enforcement Administration to prescribe buprenorphine-naloxone to treat opioid use disorder. SAMHSA tracks the number of certified physicians by state who are eligible to provide buprenorphine treatment for opioid dependency and the number is steadily increasing (https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/certified-physicians). In largely rural West Virginia, for example, the number of physicians with a waiver increased from 14 in 2005 to 79 in 2016.

Even less available in rural areas are detoxification centers, where patients stay during their initial opioid withdrawal. Most rural residents (82 percent) live in a county without a detox provider, while rural detox providers are concentrated in large rural towns. More than half of all rural detox providers service a 100-mile radius. Thus, local law enforcement or emergency departments often end up providing the initial detoxification.

Among the few rural opioid treatment programs that exist, most are not tailored to older adults and have long waiting lists. For some older adults with substance use disorders, attending group therapy can be uncomfortable due to profanity used by younger attendees, or the older adults feel like they have to help the younger attendees, SAMHSA points out. (See Appendix III for a list of age-specific treatment ideas.)

Other factors contributing to a lack of treatment in rural areas include underdiagnoses by health care providers, illiteracy that contributes to patients taking too many of their pain pills, a stigma against addiction that keeps patients from seeking treatment, and lack of insurance or money to pay for treatment.

ADDICTION TREATMENT FOR RURAL ELDERS

Research shows older adults with addiction issues do best in an age-specific, treatment program that is supportive and non-confrontational, according to SAMHSA. Senior-specific addiction support groups can help older adults create a life that does not involve substance abuse, as well as find peer support. Therapists can help the older adult figure out the causes of his/her addiction and develop solutions. Medications also are available to treat addiction to opioids.

Treatment programs need to address coping with depression, loneliness and loss (e.g. death of a spouse, retirement); and rebuilding social support networks. It is important to employ staff experienced in working with elders and provide linkages to medical services, aging services and institutional settings. Other elements might include marital and family involvement/therapy and case management. In rural areas, collaboration among health and social service programs is especially crucial to resolve problems posed by geography, lack of public transportation, sparse and distant services, and social isolation, SAMHSA said.

Because there is a wide variation in the characteristics of each rural area, experts say each community needs to develop its own unique approach to addressing the problems of opioid abuse. Guidance can be obtained from research identifying the unique needs of older adults, as well as from prevention and treatment programs that have been set up in a few rural areas.

Project Lazarus uses a public health model based on the twin premises that drug overdose deaths are preventable and that all communities are ultimately responsible for their own health. It focuses on public awareness, local coalition action to coordinate the community response, and using data to ensure local needs are met. Other communities may prefer to work through their public health networks, aging services, health care providers, or other entities.

“One size does not fit all,” according to Nicole MacFarland, PhD, executive director of Senior Hope Counseling, Inc. of Albany, N.Y., which is one of the few senior-only free-standing addiction treatment centers in the nation. “Offering older addicted adults treatment in smaller groups, with seasoned geriatric addictions clinicians, who talk loudly, who discuss topics slowly and who share age-specific topics is very helpful,” she said. “Addicted elders benefit from being among elders talking about age-related issues with their peers.” Among clients who complete the Senior Hope program, 60 percent successfully discontinue alcohol and/or substance abuse.

While the majority of Senior Hope Counseling clients abuse alcohol, the center has seen an increase in heroin abuse in recent years. “Elders start out using prescriptive painkillers to help the multitude of medical problems they have and then may find themselves turning to street heroin because they cannot obtain enough prescription pain medications,” MacFarland explained. Opioid addiction rates have varied from 1.7 percent to 11 percent among Senior Hope Counseling clients over the last five years, based on data from the New York State Office of Alcoholism and Substance Abuse Services. The number could double to 22 percent in the future, she predicted.

For a list of age-specific addiction treatment tips from Senior Hope Counseling, see Appendix II.

In some rural areas, telehealth is a good option for substance abuse treatment. Project ECHO (Extension for Community Healthcare Outcomes), operated through the University of New Mexico’s School of Medicine, has telehealth clinics at eight rural New Mexico community health centers to help primary care practices provide addiction treatment. The clinics link community health workers and family nurse practitioners so they can screen, identify and treat substance use disorders. Project ECHO also educates pharmacists to prescribe and dispense naloxone to clients at risk of opioid misuse or overdose.

Minority Groups. Several studies indicate minorities do better in treatment programs tailored to their ethnicity or race. For example, when Mexican Americans were offered treatment within an ethnicity-specific program, they were 11 times more likely to return for a second session than when they were offered services in a mainstream program not tailored to Mexican Americans, a SAMHSA report indicates.

In rural North Carolina, the Qualla Boundary Eastern Band of the Cherokee Indians joined Project Lazarus to reduce opioid misuse because the tribe was facing drug addiction among its members of all ages. “Their efforts are still continuing and they implemented a Project Lazarus throughout the reservation,” Brason said. “The hospital now has a great pain management program, with a new facility, so they now have more drug treatment available. Even so, they are still having issues. Hepatitis C is running rampant, so we’re trying to help with that. We’ve put in drug disposal units so people can get rid of their old medications,” he said.

In rural Oklahoma, Cherokee Nation’s behavioral health division has a SAMHSA grant to strengthen its drug misuse prevention efforts. The funds are being used to raise awareness about the dangers of sharing medications and to address the risks of overprescribing. The approach is to the community as a whole and not to elders in particular. Unlike the Eastern

Band, which is a small isolated reservation with fewer social services, Cherokee Nation is the largest federally recognized tribal nation. It offers senior centers, wellness, social and outreach programs to its elders, which can be a protective factor for preventing drug abuse. The program also has worked with nursing homes, where there is a problem with opioid diversion, to ensure there are better policies for locking up medications, monitoring their distribution and enforcing violations.

CONCLUSION

"Some of the things that need to be done can only be accomplished by federal agencies, but many can be accomplished at the state level and by non-governmental organizations. Public/private partnerships and community-based efforts are essential to change of this magnitude." — PAINS Project

With the rapid aging of the population—both those already 65+ and those nearing older ages—we can expect opioid misuse to become an even bigger problem for those working with older adults. This will be a huge challenge for an aging network already overwhelmed with waiting lists and flat resources. Thus, the time is right to help the aging services network anticipate the complex needs of the next cohort of elders in geographic areas affected by opioid addiction. This new population will surely fit the Older Americans Act requirement to serve those in the "greatest economic or social need."

No one rural area resembles another. As one researcher from the University of Nebraska-Lincoln pointed out, the causes and implications of rural drug use differ as much from one region to another, or even one county to another, as they do from urban areas. Therefore, what works in one area may not work in another. But bringing together the entire community can help ensure that the unique needs and resources of an area are brought into consideration.

Solutions will involve federal, state and local governments, funders and other vested interests. Activities should include

- Educating health professionals and the public about appropriate use,
- Implementing prescription-drug monitoring programs,
- Taking enforcement and regulatory actions to address egregious prescribing (e.g., eliminating "pill mills"),
- Developing prescription opioids that incorporate abuse-deterrent technologies, and
- Creating more senior-focused treatment centers.

Some communities work through their public health networks, aging services, health care providers, and other entities. Researchers have identified the following organizations as the most important for successful opioid prevention and treatment campaigns: health departments, schools, governmental agencies, hospitals, primary care clinical practices, churches and newspapers. Also important in rural areas are television/radio stations, health-related nonprofits, substance abuse treatment centers and colleges.

For an example of a community-based approach, see Project Lazarus in Appendix I. Many other programs exist around the country. Senior Hope Counseling, an elder-focused outpatient substance use program in Albany, N.Y., offers small group elder-specific sessions that provide a comfortable space for attendees to discuss age-related or generational issues with peers (see

Appendix II.) Professionals with expertise in geriatric substance use disorders lead the sessions.

The Hazelden Betty Ford Foundation has programs focused on older adults, such as the "Recovery@50Plus" inpatient and outpatient drug and alcohol rehab program for older adults (http://www.hazeldenbettyford.org/treatment/models/specialized-programs/older-adults). The focus is on individually paced care for Baby Boomers and seniors, a supportive recovery community, addressing age-specific addiction issues such as physical health, and rediscovering purpose and meaning in life. A continuing care plan is an important part of the program.

The best approaches understand the uniqueness of rural older adults; the importance of age-specific programs that focus on rebuilding social support and address coping with depression, loneliness and loss; and the need for community awareness of the impact of the opioid epidemic on rural older adults. Also see Programming Ideas (Appendix III) and Resources (Appendix V).

Appendices:
Appendix I: Project Lazarus: Taking Community Responsibility
Appendix II: Age-Specific Treatment Tips (Senior Hope Counseling, Inc.)
Appendix III: Programming Ideas
Appendix IV: Understanding Opioid Addiction
Appendix V: Resources
Appendix VI: Glossary

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Appendix I: PROJECT LAZARUS: Taking Community Responsibility

Project Lazarus is a public health model based on the twin premises that medication and drug overdose deaths are preventable and that all communities are ultimately responsible for their own health. The Project Lazarus pilot program began in the Blue Ridge Mountains area in rural Wilkes County, N.C., as a community-based initiative to reduce opioid-related overdoses, abuse and drug diversion; present responsible pain management; and promote substance use treatment and support services. The latter, which was not in existence at the onset of Project Lazarus, now serves over 500 clients each day," Executive Director and CEO Fred Brason II explained.

Pennsylvania and West Virginia are working on adopting the initiative statewide as well. Project Lazarus initiatives are underway in more than two dozen states and communities nationwide.

Project Lazarus has been cited by SAMHSA, the Rural Health Information Hub, and community and academic analyses. The U.S. Agency for Healthcare Research and Quality labeled the project as having a "moderately high" impact potential for treating substance abuse.

Successes. Before Project Lazarus began in 2008, Wilkes County's accidental opioid poisoning death rate was nearly five times the national average and three times the state average. Wilkes County is predominantly white and 46 percent of the population is age 45 or older.

Within two years, county health department medical directors had trained every medical prescriber of opioids using the Project Lazarus training toolkit. By 2011, Wilkes County had experienced a 69 percent drop in the overdose death rate, a 15.3 percent reduction in substance abuse-related emergency department (ED) admissions and a significant increase in the number of medical care providers who had registered with the state prescription drug monitoring program.

By 2013, the rate of hospital emergency department overdose-related visits had dropped by 18 percent in North Carolina counties with overdose prevention coalitions. And, in communities that embedded their Project Lazarus with the local health department, their ED visits dropped by 26 percent, according to an evaluation by the University of North Carolina, Brason said.

How It Works. Project Lazarus focuses on three areas: 1) public awareness, 2) local coalition action to coordinate the community's response and 3) utilization of data and evaluation to ground the community's response in its locally identified needs. These "hubs," as the program calls them, are accompanied by seven "spokes": 1) community education, 2) provider education, 3) hospital emergency department policies, 4) diversion control, 5) chronic-pain patient support, 6) harm reduction and 7) addiction treatment. Brason strongly recommends that communities adopt all seven of these "spokes" in order to ensure maximum success.

Project Lazarus is vested in the idea of "community responsibility" for its own problems. "Everybody needs to be engaged and the community needs to own it," Brason said. With that philosophy and some seed money, local money often pours in. "When we start to engage other communities and they see this roadmap that we've done with some success, and that they can do that, all of the sudden local money seems to show up."

LESSON LEARNED: “Every community in North Carolina is different, ranging from sprawling urban cities to tight-knit rural towns in the mountains and along the coast, from U.S. military bases to American Indian reservations. Each comes with its own built-in prejudices, biases and belief systems. And as every community is ultimately responsible for its own health, its response to the epidemic of overdose deaths from prescribed pain medication, and to the increasing prevalence of substance use disorders among the citizens, will be equally unique.”
(Other lessons learned are available in the paper: Brason F. Lessons Learned from Implementing Project Lazarus in North Carolina. 2016. https://iprc.unc.edu/files/2016/08/Lessons-Learned-White-Paper-FINAL-8-15-16.pdf)

The successful implementation of Project Lazarus in Wilkes County led to its implementation in North Carolina’s other 99 counties, the Cherokee Nation and the U.S. Army’s Womack Medical Center at Fort Bragg.

The expansion did require considerable additional resources, Brason said. The private foundation Kate B. Reynolds Charitable Trust and the North Carolina Office of Rural Health and jointly contributed $2.6 million for activities in 84 counties with a Centers for Medicare & Medicaid Services innovation grant with Mountain Area Health Education Center and Project Lazarus for the remaining 16 counties. The state’s Medicaid program, Community Care of North Carolina, provided the clinical and administrative infrastructure to implement Project Lazarus in the state’s 14 Medicaid networks, which offer a clinical infrastructure to providers who treat the medically indigent across the entire state. And the U.S. Centers for Disease Control and Prevention funded the Injury Prevention Research Center of the University of North Carolina at Chapel Hill to evaluate the effects of the statewide rollout of Project Lazarus.

How Other Communities Can Adopt. Project Lazarus offers information to other communities seeking to set up similar programs. Brason stresses that success improves by adopting all of the program’s components, not just a few. “When Project Lazarus is collectively and comprehensively done across the board, then there is a difference,” Brason said.

“I hear from communities every day who say, ‘How can you help us?’ I say, ‘I can help you, but I can’t do it for you. And I don’t want you to do what we did. I want you to take what we’ve done, and tweak it, color it, implement it according to who you are and what your community is, because no two communities are alike. Build it within your current infrastructure’,” he said.

“The problem is in every community. So the need is there. There are lots of communities that are doing something, but not *everything*,” Brason continued. “So we engage the stakeholders, and give them a presentation of what this is and what it looks like, and get their buy-in to the program, and then I say to the hospital CEO, the county commissioner, or the school superintendent: ‘I don’t want you, but I want your people who will do the work and make the difference at the ground level.’ Between presentations, workshops and technical assistance, they can develop action plans and strategies that they can carry out themselves.”

The following organizations were identified by researchers analyzing Project Lazarus as the most important for successful public health campaigns: health department, schools, governmental agencies, hospitals, primary care clinical practices, churches and newspapers. Important roles are also played in nonurban areas by television stations, health-related nonprofits, substance abuse treatment centers and colleges.

Organizations interested in adopting a Project Lazarus program can go to its website (http://projectlazarus.org/) and select “Communities & Coalitions.”

Appendix II: AGE-SPECIFIC TREATMENT TIPS (Senior Hope Counseling, Inc.)

Senior Hope Counseling, Inc. of Albany, N.Y., which is one of the few senior-only free-standing addiction treatment centers in the nation, has identified common themes and findings for age-specific treatment facilities:

Age-Specific Groups

- Older addicted adults report that they benefit from smaller groups that focus on age-specific topics run by professionals with geriatric addictions and mental health background.
- Elders benefit from being treated with individuals their same age talking about age related issues. They experience a true connection when they are able to relate to individuals who are at similar stages of the life cycle.
- Older adults have repeatedly stated they are uncomfortable with profanity in the group session. This is more common when they are grouped with younger patients.
- Elders engaged in the program have repeatedly stated that they have felt like ‘mom’ or ‘dad’ in the rooms when they are in treatment with younger patients. They are focused on helping others and often times report their own needs are not being met.
- It is important for the group facilitator catering to older addicted adults to talk loudly, slowly, and design group exercises in a way that meets the needs of an older population.

Age-Sensitive Approach

- Having age-related materials in the waiting room helps older adults feel more comfortable in the waiting room. Large print materials should be available.
- Having accommodations on the first floor for non-ambulatory patients is a necessity. Providing transportation to pick up patients who may not be able to take buses due to their physical limitations can assist those who may otherwise not have an opportunity to engage in an age-specific treatment facility.
- Being sensitive to the generation these individuals grew up in is critical. Many patients did not grow up in a time period where going to a psychiatrist or attending group therapy was the norm. Stigma is very important when considering engagement and retention of older addicted adults who may be very ashamed of their addiction and or mental health issue.
- Finding meaning and purpose in later life is so important. Often elders do not feel anyone needs them anymore and that they have nothing to do. This becomes very difficult for an individual who was vital in earlier years, engaged in a meaningful job, enjoyed family and friends, and was financially stable. Increased depression, higher risk for suicide and increased usage of drugs/alcohol are all tied into the lack of meaning and purpose.

Special Groups as Needed

- For patients who suffered childhood trauma, Senior Hope Counseling developed a Trauma Survivors’ Group to help older addicted adults have a safe place to discuss the impact early childhood trauma had on later-life addictions, mental health and physical wellness.

Community Linkages

- Also critical to working with older addicted adults is the connection of services in the community. So often older adults may feel too tired, disabled, overwhelmed, and alienated to identify what services in the community may help them. The geriatric addictions provider can act as a liaison helping the older addicted adult to receive entitlements and connect with services in the community that may assist them with their loneliness, transportation needs, housing, mental health and physical health needs.

To learn more about Senior Hope Counseling, go to http://www.seniorhope.org/

Appendix III: PROGRAMMING IDEAS

Rural Communities: Prevention programs can help control substance abuse in rural communities and should begin by targeting adolescents as well as adults. Counselors, healthcare professionals, teachers, parents and law enforcement can work together to identify problems and develop prevention strategies to control substance abuse in rural communities. Activities can include community or town hall meetings; inviting speakers to talk to adults and children; collaborating with churches and service clubs to provide a strong support system for individuals in recovery; training adults in the community to serve as volunteers to identify and refer individuals at risk; developing a formal substance abuse prevention or treatment program for the community; and collaborating with human services providers and local service organizations to ensure families affected by substance abuse have adequate food, housing and mental health services. More ideas: Rural Health Information Hub, https://www.ruralhealthinfo.org/topics/substance-abuse

Public Health: Create and disseminate large-print promotional materials that specifically target older adults. Ensure that media coverage about a particular drug abuse problem accurately reports the facts, and tells how people can get involved in the solution. Encourage pharmacists to provide clear information and advice about how to take medications properly and any possible drug interactions. Create programs and activities during Prescription Awareness Month, held in October each year. Link with local Adult Protective Services programs when elder abuse is suspected (http://www.napsa-now.org/get-help/help-in-your-area). More ideas: Center for Applied Research Solutions, http://cars-rp.org/wp-content/uploads/2014/06/Prevention-Tactics-Vol09-No02-2008.pdf

Aging Services: Integrate screening and brief interventions into existing programs, such as medication reviews. Implement depression and pain management programs, such as Healthy IDEAS, PEARLS and the Chronic Pain Self-Management Program, to address common problems among older adults that can lead to psychoactive prescription medication misuse. Become familiar with and build relationships with substance abuse prevention and treatment providers in your community for cross-referrals and collaborative programs. More ideas: U.S. Administration for Community Living, https://www.acl.gov/programs/health-wellness/behavioral-health

Health Care Providers: Increase education of health professional students and medical residents on treating chronic pain and safe prescribing. Increase access to evidence-based addiction treatment. Create community partnerships to ensure access to emergency devices that reverse opioid overdoses. More ideas: U.S. Health Resources and Services Administration, https://www.hrsa.gov/ruralhealth/

Grandparents: Promote services to grandfamilies through the aging services network by urging states to maximize use of the National Family Caregiver Support Program. Make sure grandfamilies get the full range of legal and financial options, information, assistance and support they need to help the children thrive. Ensure children in foster care are placed with families, prioritizing placements with relatives when possible and providing the supports they need to care for the children. Shore up legal options for grandfamilies. More ideas: Generations United, http://www.gu.org

Appendix IV: UNDERSTANDING OPIOID ADDICTION

Opioids are narcotics prescribed to manage pain from surgery, injury and illness. They also are sold on the street in illicit forms. Opioids can create a euphoric effect when they combine with receptors in the brain. Prolonged use of increasingly higher doses of opioids actually changes the brain so that it needs the drug to function. A key aspect of recovery from opioid abuse is the process of reversing, to the extent possible, the brain changes from opioid addiction.

When discussing addiction, it is important to remember the importance of these medications for people with severe pain, and that only a small number of people misuse their medications. University of New Mexico researchers reported that 20 percent to 30 percent of opioids prescribed for chronic pain are misused, but only about 10 percent result in an addiction. Physical dependence and tolerance are normal physiological consequences of extended opioid therapy for pain and are not the same as addiction. (See Glossary for definitions.)

Due to their effect on the part of the brain which regulates breathing, opioids in high doses can slow breathing and cause death. In addition, many "street drug" versions of opioids contain highly toxic chemicals. Fentanyl is 25-40 times stronger than heroin and 50-100 times more powerful than morphine, according to the U.S. Drug Enforcement Agency. Prescription versions of fentanyl are essential for controlling cancer and other types of intractable pain.

Powerful versions of illicit fentanyl can kill a person who touches the medication without a glove (it is absorbed through the skin). Illegal forms of fentanyl are primarily manufactured in Mexico with ingredients from China. Increased use of illicit fentanyl and heroin are tied to the most recent increase in deaths. From 2014 to 2015, there was a 73 percent increase in fatal overdoses involving synthetic opioids, primarily fentanyl.

The shift from opioid pills to heroin often occurs when an older adult can no longer obtain an opioid prescription, or cannot afford to pay for it. Heroin is cheaper and more accessible and is now becoming more common among current prescription opioid abusers, researchers found.

History. The current opioid epidemic is certainly not the first drug crisis in America, which has had a long history of drug abuse (morphine and opium following the Civil War; even Coca-Cola once contained cocaine). The heroin epidemic in the 1960s involved an estimated 1 million people, both white and nonwhite. The 1980s crack epidemic (smoked version of cocaine) affected an estimated 12.2 million people, primarily in central-city black and Hispanic communities, according to the National Institute on Drug Abuse.

Noting the intensity of the public focus on the current opioid epidemic, the PAINS Project (Pain Action Alliance to Implement a National Strategy) in its 2016 State of Chronic Pain report, wrote, "Some argue that the national initiative to address the opioid epidemic is unlike anything since the public health response to the HIV/AIDS epidemic in the late 1980s. In response to a question about the opioid epidemic during a nationally-televised debate, John Kasich, Governor of Ohio and candidate for the Republican presidential nomination, said…

"And sometimes I wonder how African-Americans must have felt when drugs were awash in their community and nobody watched. …" — John Kasich

Now all eyes are on opioid abuse.

Treatment of Pain. Finding a balance between adequately treating pain and preventing opioid addiction is a conundrum facing the nation.

Opioids are prescribed to prevent pain from transitioning from acute pain (associated with injury, surgery or disease) to a neurologic chronic disease process. “If you don’t properly treat acute pain” within a short timeframe, “then the brain rewires and it becomes a neurologic disease, like phantom limb pain syndrome when you lose a limb. We need to make sure that doesn’t happen,” explained Myra Christopher, director of the Pain Action Alliance to Implement a National Strategy (PAINS).

Concerns that older adults were being undertreated for pain prompted government and medical organization recommendations to properly address the treatment of acute pain. The Institute of Medicine in 2011 concluded that when opioids are used as prescribed and appropriately monitored, they can be safe and effective, especially for acute, postoperative and procedural pain, as well as for patients near the end of life who desire more pain relief.

Prescription opioids became widely available starting in the mid-1990s. Between 1997 and 2007, retail sales had increased 13-fold for methadone, 9-fold for oxycodone and 4-fold for hydrocodone. By 2010, enough prescription opioids were sold to medicate every adult in the United States with a 5-milligram pill of hydrocodone every 4 hours for a month. In 2012, health care providers wrote 259 million prescriptions for painkillers, which CDC says is enough for every American adult to have their own bottle of pills.

“The pendulum has swung from one extreme to another,” Christopher explained. During the 2000-2010 Decade for Improving Pain, Congress, federal agencies and others focused almost exclusively on promoting better pain management. Since the early part of this decade, the locus of concern has shifted onto the opioid epidemic and is almost exclusively on that issue, which many argue is directly related to efforts to improve pain care, she said. For me, the locus of concern of the feds has been misplaced. Instead of looking at those who rely on these meds because they have a chronic disease—chronic pain IS a neurologic disease—we ought to be looking at the treatment of *acute* pain. We ought to be looking at the treatment of acute pain in order to prevent chronic pain and reduce opioid prescribing.”

Congress has been looking into opioid marketing. The Senate Finance Committee has not yet released a report from its 2012 investigation into the causes of the opioid epidemic. The committee gathered information from three leading opioid makers and organizations advocating for pain patients. More recently, the Senate Homeland Security and Government Affairs Committee in 2017 asked pharmaceutical manufacturers to release their marketing information on opioids. The results of those investigations are not yet known.

The link between opioid availability and addiction is still being debated in scientific circles—is it a correlation or is it cause-and-effect? The rapid rise in opioid overdose deaths is associated with the increase in prescriptions written, especially those for higher doses, longer-term use and/or in conjunction with benzodiazepine tranquilizers, according to the U.S. Centers for Medicare & Medicaid Services.

“We know there is a correlation between efforts to improve chronic pain care and the opioid epidemic, but even CDC’s former director Tom Frieden, who spent much of his time bringing the opioid crisis to the attention of the federal government and the American public, stated publicly that there is no known *causal connection* between these two public health issues,” Christopher said. PAINS’ “No Longer Silent” initiative seeks to clarify the relationship between opioid prescribing for chronic pain and the opioid epidemic—two critically important public health issues.”

Appendix V: RESOURCES

As You Age: A Guide to Aging, Medicines, and Alcohol (brochure), http://store.samhsa.gov/shin/content//SMA04-3940/SMA04-3940.pdf
As You Age: There's No Better Time to Learn More about How to Take Medications the Right Way (flyer), http://store.samhsa.gov/shin/content//AVD189/AVD189.pdf
Behavioral Health Treatment Services Locator, https://findtreatment.samhsa.gov/locator/home (enter zip code to find local services)
Building Successful Partnerships between Law Enforcement and Public Health Agencies to Address Opioid Use, https://ric-zai-inc.com/Publications/cops-p356-pub.pdf
The Elderly and Prescription Drug Medicines (community strategies, pp. 5-6), http://www.cars-rp.org/wp-content/uploads/2014/06/Prevention-Tactics-Vol09-No02-2008.pdf
Get Connected Tool Kit: Linking Older Adults with Medication, Alcohol, and Mental Health Resources, http://store.samhsa.gov/shin/content/SMA03-3824/SMA03-3824.pdf
Governor-Led Initiatives to Address Opioid Epidemic (state map), https://www.thenationalcouncil.org/opioid-use-disorders/
Health Professionals Resources, https://www.hhs.gov/opioids/health-professionals-resources/index.html
Heroin and Prescription Painkillers: A Toolkit for Community Action, www.hazelden.org/OA_HTML/ibeCCtpItmDspRte.jsp?item=492139&sitex=10020:22372:US
How to Talk to an Older Person Who Has a Problem with Alcohol or Medications, http://www.hazeldenbettyford.org/articles/how-to-talk-to-an-older-person-who-has-a-problem-with-alcohol-or-medications
Intervention, Treatment, and Prevention Strategies to Address Opioid Use Disorders in Rural Areas: A Primer on Opportunities for Medicaid-Safety Net Collaboration, http://nashp.org/intervention-treatment-and-prevention-strategies-to-address-opioid-use-disorders-in-rural-areas/
Medication-Assisted Treatment for Opioid Addiction: Facts for Families and Friends, http://store.samhsa.gov/shin/content/SMA14-4443/SMA14-4443.pdf
Opioid Misuse Strategy 2016, https://www.cms.gov/Outreach-and-Education/Outreach/Partnerships/Downloads/CMS-Opioid-Misuse-Strategy-2016.pdf
Opioid Overdose Prevention Toolkit, http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2016/SMA16-4742
Population over Age 65 by County, https://www.ruralhealthinfo.org/rural-maps/mapfiles/population-over-age-65-county.jpg
Prescription Drugs: Abuse and Addiction, https://www.drugabuse.gov/sites/default/files/rrprescription.pdf
Prescription and Illicit Drug Abuse: Preventing Substance Abuse, https://nihseniorhealth.gov/drugabuse/preventingsubstanceabuse/01.html
Raising the Children of the Opioid Epidemic: Solutions and Support for Grandfamilies, http://www.gu.org/OURWORK/Grandfamilies/TheStateofGrandfamiliesinAmerica/TheStateofGrandfamiliesinAmerica2016.aspx
Resources from the Department of Health & Human Services, https://www.cdc.gov/drugoverdose/prescribing/hhs.html
Rural Prevention and Treatment of Substance Abuse Toolkit, https://www.ruralhealthinfo.org/community-health/substance-abuse
Substance Abuse Among Older Adults: A Guide for Social Service Providers, https://www.ncbi.nlm.nih.gov/books/NBK64419/
Substance Abuse Relapse Prevention for Older Adults: A Group Treatment Approach. http://store.samhsa.gov/product/Substance-Abuse-Relapse-Prevention-for-Older-Adults-A-Group-Treatment-Approach/SMA05-4053
Taking Medicines Safely, https://nihseniorhealth.gov/takingmedicines/takingmedicinessafely/01.html
Treating Opiate Dependence in Rural Communities: A Guide for Developing Community Resources, http://files.ireta.org/opiates2005/10.pdf
TurnTheTideRx, http://turnthetiderx.org/

Appendix VI: GLOSSARY

Addiction: Occurs in only a small number of persons exposed to opioids. It is a chronic, relapsing disease characterized by compulsive drug seeking and use, despite serious adverse consequences, and by long-lasting changes in the brain, according to the National Institute on Drug Abuse. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.

Drug Diversion: The redirection of prescription drugs for an illegal purpose, such as recreational use or illegal resale.

Medication-Assisted Treatment (MAT): Currently there are three medications approved and indicated for the treatment of opioid dependence: methadone, buprenorphine/naloxone, and naltrexone.

Misuse vs. Abuse. Misuse involves using a medication in ways other than prescribed (say, taking it too often, or using a dental pain pill for a later backache) or sharing the drug with someone else who is in pain. It does not involve using the drug to get "high."
Abuse has been defined as "misuse with consequences." Abuse involves the use of a substance to modify or control mood or state of mind in a manner that is illegal or harmful to oneself or others. Diversion is a third category that involves intentionally shifting the opioid from its legitimate purposes into illegal channels (generally selling it).

Opioids Types: Opioids is an umbrella term for natural and synthetic painkillers derived from or based on the poppy plant (*Papaver somiferum*). The related term "opiate" applies only to those medicines that use natural opium poppy products. Opioids are classified into three groups:
Medications made directly from opium poppies (these are naturally occurring opioids such as morphine and codeine). (Heroin is an illicit opioid drug made from morphine.)
Semi-synthetic opioids created in the laboratory from naturally occurring compounds (these include pain medications such as oxycodone and hydrocodone).
Synthetic opioids created in a laboratory (fentanyl and methadone). There are both legal and illicit forms of fentanyl. Illicit forms of fentanyl are often mixed with heroin.

Physical dependence. Dependence occurs when a person relies on a drug to prevent withdrawal symptoms. Withdrawal symptoms can include anxiety, piloerection ("goose bumps"), chills, insomnia, diarrhea, nausea, vomiting, and muscle aches. Physical dependence, by itself, does not equate with addiction.

Prescription drug monitoring programs (PDMP): State-run databases that track prescriptions for painkillers and can help find problems in overprescribing. All but one state (Missouri) have a PDMP.

Tolerance. Tolerance occurs when the body needs to use higher doses to get the same effect. This often occurs with extensive opioid prescribing.