



Rural Communities in Crisis: Strategies to Address the Opioid Crisis

Introduction

Rural communities are struggling with a crisis involving prescription opioids and heroin. The drug of choice varies from community to community. In some communities, prescription opioids are the leading problem, driven by excessive prescribing practices (Okie 2010; Vital Signs 2014; MMWR 2014) and diversion of prescription medications (CDC Telebriefing 2015). In others, it is heroin, driven by low costs and easy access. In either case, prescription opioid and heroin use are interrelated (Kolodny, et al 2015; Unick et al 2013). Efforts to restrict the supply of one frequently drives increased use of the other (Farwell, 2014; Weinberg, 2014; Hench, 2014). As will be discussed in this policy brief, the opioid crisis in rural communities is incredibly complex and one that will not be solved easily.

The opioid crisis affects rural communities in multiple ways. At one level is the direct cost to individuals suffering from opioid use disorders including ongoing health problems, high rates of overdose deaths, greater risk of homelessness, and exposure to human immunodeficiency virus (HIV) and hepatitis-C (HCV), and incarceration. The second level involves the social problems affecting the community including increased criminal behavior to support drug habits; higher rates of domestic violence, child neglect, sexual trafficking, and prostitution; greater demands on the health care, social service, and criminal justice systems; the disintegration of community pride, image, and social networks; and declining property values. The challenges to coping with the opioid crisis in rural communities, which will be addressed in the discussion of policy recommendations, include:

- A focus on criminalizing opioid use disorders as a first response rather employing chronic disease and/or legal interventions as appropriate to an individual's history of opioid use and legal history;
- Stigma that discourages people from seeking treatment and views substance use disorders as a moral failure;
- Limited support for evidence-based prevention services;
- Inadequate access to local opioid use treatment, including medication assisted therapy;
- Challenges faced by rural emergency medical services (EMS) systems in responding to opioid overdoses including long travel distances, longer response times, and staffing patterns which rely on volunteers and/or lower skilled staff (i.e., first responders, EMT-basis) and are less likely to include paramedic level staff;
- Shortages of trained substance use and mental health professionals;
- Excessive prescribing practices by providers not following evidence-based prescribing guidelines;
- Resistance to harm reduction (e.g., naloxone and needle exchange) programs due to an adherence to an abstinence approach to substance use disorders and/or ideological principles in which abstinence, prevention, and enforcement are the only acceptable approach to deal with this problem (Hathaway & Tousaw 2008);

- Inadequate care coordination to assist patients in accessing needed services and supports;
- Poor collaboration between providers, social services, police, and community resources;
- Insufficient access to recovery services to help patients maintain sobriety after treatment; and
- Ongoing economic and social challenges that fuel substance use and other social problems.

The growth in opioid use and the related health care and social problems call for a comprehensive community-based public health approach (Office of the President 2011; Kolodny, et al. 2015; Crawford 2014). This policy paper outlines strategies to help curb the current opioid crisis in rural America.

Data on Rural Opioid Use

Nonmedical use of opioid pain relievers and heroin has grown significantly in recent years (Jones 2013; Kuehn 2013) and is higher among rural adolescents (Havens et al 2011), young adults (Hartley 2007), and in states with large rural populations such as Kentucky, West Virginia, Alaska, and Oklahoma (Keyes 2014). In February 2014, officials from the National Institute on Drug Abuse and the Centers for Disease Control and Prevention (CDC) described the growing shift in heroin use from urban to rural areas (Koebler 2014). Okie (2010) described “a striking shift in the prevalence of fatal drug overdoses from urban to rural counties”. Higher non-medical use of opioid pain relievers among rural populations suggest the potential for growth in rural heroin use and associated illegal activities, arrests, use of emergency services, overdose deaths, and transmission of blood-borne diseases. Dramatic increases in rates of HIV and HCV in rural Scott County, Indiana have been traced directly to the intravenous injection of Opana, a prescription opioid (CDC MMRW 2015).

Tom Frieden, Director of the CDC, noted that increased numbers of Americans are “primed for heroin addiction because they are addicted to or exposed to prescription opioid painkillers” (CDC Telebriefing 2015). The CDC (Vital Signs 2014 and MMWR 2014) described significant problems with opioid prescribing practices with providers in the highest prescribing state writing three times as many opioid prescriptions as the lowest prescribing state. Southern and Appalachian states had the highest rates of opioid prescriptions per person (with the highest in Alabama, Tennessee, and West Virginia) (Vital Signs 2014; Zhang, et al 2008). This is not a new phenomenon as the Appalachian states; particularly coal mining states had rates of prescription drug misuse that were twice those of the rest of the nation (Zhang 2008). In 2012, northeastern providers wrote the most prescriptions for long acting and high dose painkillers per person (with the highest in Maine and New Hampshire) (Vital Signs 2014). The types of opioids prescribed vary as well with Tennessee prescribers writing 22 times as many prescription for Opana/oxymorphone as those in Minnesota (ibid). Recent studies suggest that opioids are being overprescribed for low-risk surgical and dental procedures (Wunsch et al, 2016; Baker et al, 2016).

National Strategies to Address the Opioid Crisis

The White House Office of National Drug Control Policy’s 2015 National Drug Control Strategy outlined a multifaceted public health approach emphasizing prevention; early identification and

treatment; recovery services to support long to long term life style changes; harm reduction (e.g., naloxone to prevent overdose deaths and needle exchanges to reduce HIV and HCV exposure); and enhanced enforcement activities. The Office of the President (2011) further recommended broad-based education on nonmedical opioid use, safe prescribing practices, and the need to reduce opioid availability; expanded use of prescription drug monitoring and utilization review programs; safe storage and disposal programs; and enforcement focused on the illegal diversion of opioids for criminal gain.

Challenges Facing Rural System of Care

Rural America has long suffered from gaps in the availability of substance use treatment services, particularly related to medication assisted therapy (i.e., methadone and buprenorphine) programs for opioid use (Lenardson et al, 2009; Quest, et al 2012). These programs are recognized to be among the most effective treatment for opioid addiction (Quest, et al 2012; Vlahov, 2010). The Substance Abuse and Mental Health Services Administration's (SAMHSA's) buprenorphine waiver program provides an important tool to rural physicians to treat patients with opioid use problems.

At the same time, infrastructure challenges experienced by rural EMS systems create difficulties in responding to the higher rates of opioid overdoses in rural communities (Faul, et al, 2015). Rural EMS delivery systems are plagued by long travel distances; lower population density; longer response times, staffing patterns which rely on volunteers and/or lower skilled staff (i.e., first responders, EMT-basic) and less on paramedic level staff; limited access to training and education; lower call volumes; and longer transport times. Opioids are central nervous system depressants that can severely compromise respiratory function in the case of an overdose. Studies suggest that rural communities suffer from greater naloxone restrictions than urban communities. EMS providers are less likely than urban providers to administer naloxone in the case of opioid overdose due to the staffing issues described above. Additionally, EMTs are unable to administer intravenous naloxone, which is more effective than nasal naloxone, and use endotracheal tubes to establish a patent airway. These issues along with the longer travel distances and transport times are likely contributing factors to the higher rate of overdose deaths in rural areas.

In addition to gaps in the availability of services to treat opioid use, rural America is facing another evolving crisis involving the transmission of HIV and HCV due to intravenous opioid use. The town of Austin, IN, a community of 4,200 in rural Scott County, shows how serious this crisis can be. A number of issues came together in Austin to create a "perfect storm" that resulted in 169 new cases of HIV in six months with more than 80% co-infected with HCV (Strathdee & Beyrer, 2015). This largest outbreak of HIV in Indiana history was driven by several factors. The area experienced a significant escalation of intravenous use of oxymorphone (trade name Opana), other prescription opioids, and heroin. Needle exchanges were illegal under Indiana state law with the use of needles for nonmedical purposes classified as felony punishable by up to three years in prison. Even after the governor suspended the law by declaring a public health emergency, access to sterile needles in Scott County was hampered by inadequate funding, requirements that injection-drug users register with their initials and date of birth, limited program hours, and the continued prosecution of unregistered injection-drug users for carrying syringes. Access to substance use treatment and infectious disease services in rural Indiana is extremely limited, a problem shared by many rural communities. Finally, access to HIV and

HCV testing in Scott County was hampered by high rates of uninsurance, stigma, and funding cutbacks that led to the closure of five Indiana clinics offering free HIV testing (including one in Scott County). Many public and rural health experts worry that similar outbreaks could occur in rural communities throughout the country. These outbreaks would further burden a public and rural health system already pressed to serve substance use populations and could lead to further discrimination of these individuals.

Policy Recommendations to Address the Opioid Crisis in Rural Communities

- ***Support the implementation of models to engage rural communities in addressing opioid issues***
 - Develop broad-based community coalitions to address the complex and variable nature of rural opioid use by educating and engage community members to reduce stigma and excessive use of opioids; developing community-level substance use and pain management services; implementing harm reduction and prevention strategies, engaging law enforcement, and identifying and addressing opioid issues specific to their communities. Although study of the effectiveness of community based strategies are underway, models such as Project Lazarus in North Carolina; Project Vision in Rutland, Vermont; the Winnebago County Heroin Task Force in Wisconsin; the Clark County Collaborative in Ohio; and the Washtenaw Health Initiative Opioid Project in Washtenaw County, Michigan have yielded promising results.
 - Conduct evaluation and research studies on the effectiveness of community coalitions; use the results of such studies to enhance their performance and develop targeted strategies specific to the issues of rural communities; and develop technical assistance resources and funding to assist rural communities in implementing broad-based coalitions and adopting appropriate models to meet their needs. Due to the aforementioned complexity and variability of rural opioid use, develop multiple measures of effectiveness to monitor and improve community coalition performance.
 - Recognize and address economic issues that encourage vulnerable population to sell their prescription medications to “make ends meet”.
 - Monitor and evaluate rural programs focused on opioid prevention and treatment funded through the Office of Rural Health Policy’s Rural Health Care Services Outreach, Network Planning, Network Development, and other grant programs to identify promising models that can be adapted for use by other rural communities.
- ***Disseminate evidence-based prevention programs tailored to the needs of rural communities***
 - Disseminate information on rural relevant evidence-based prevention programs focused on community education for adolescents and adults, stigma reduction, harm reduction, and diversion control (e.g., safe storage and disposal programs). Provide technical assistance and funding to support implementation. Engage key rural stakeholder organizations such as State Rural Health Organizations and State Offices of Rural in the dissemination of these materials and educating community stakeholders on their implementation and use.
- ***Increase the implementation of harm reduction strategies***

- Undertake educational efforts to increase the acceptance of harm reduction strategies by state and community-level policymakers. Identify best legislative best practices to support and implement harm reduction strategies in rural areas, develop model legislation and related educational materials for harm reduction programs, and disseminate to State Rural Health Associations through the National Organization of State Offices of Rural Health.
- Reduce legal and regulatory barriers to development of needle exchanges, increase funding to support these programs, locate programs in convenient locations to ensure access by rural opioid users, and provide education to insure safe use.
- Increase access to naloxone to prevent opioid overdose deaths by changing state laws to expand use by first responders; providing funding and training to support naloxone use; modifying pharmacy and prescribing regulations to ease access to naloxone; and implementing programs to prescribe “take home” doses of naloxone and provide training on its use for drug users and their caregivers. Related activities include passage of “Good Samaritan” laws to reduce the legal liability involved with administering naloxone and/or calling the police in the case of an overdose.
- ***Expand access to substance use treatment services including medication assisted treatment and traditional psychosocial substance use treatment programs***
 - Expand access to treatment services through the development of an appropriate and sustainable continuum of outpatient and, as appropriate, inpatient care including medication assisted treatment, psychosocial treatment programs, mental health services, and integrated primary, substance use, and mental health services.
 - Encourage primary care providers to implement buprenorphine use in their practices by: exposing them to its use in their training; providing access to supporting psychosocial and substance use treatment; offering consultative support through hub and spoke or “Project Echo style” telehealth models; enhancing care coordination and management services; and ensuring third party reimbursement for buprenorphine services in primary care settings.
 - Collaborate with key partners at the national (e.g., National Association of Community Health Centers, the National Association of Rural Health Clinics, the American Academy of Family Physicians) and state-levels (e.g., state primary care associations, state medical societies, and medical training programs) to expand the use of buprenorphine.
 - Reduce regulatory and community barriers to methadone treatment services by easing unnecessarily restrictive licensing standards, enhancing payment for methadone services by state Medicaid programs, and educating community members to reduce opposition to methadone programs. Doing so will help to reduce the burden on rural residents who often must travel long distances on a daily basis to access services.
 - Work with legislative and regulatory policy makers to create innovative use of and payment for underutilized critical access hospital facilities/beds as potential intervention service areas for substance use patients in crisis while waiting for or relapsing after stays in residential treatment programs.
 - Expand use of team-based and integrated models of substance use, mental health, primary care to maximize scarce provider resources.

- Develop programs to assist individuals with substance use disorders to access available services including transportation programs as well as funding and support for low-income individuals to access care.
- Encourage treatment programs to accept Medicaid as a payment source and encourage the development of free and discounted care programs for low-income individuals.
- ***Enhance the capacity of rural EMS systems to respond to opioid overdoses and reduce the rate of overdose deaths***
 - Fund and conduct priority research on the issues of opioid deaths in rural communities and the development of interventions to improve prehospital treatment of opioid overdoses in light of the infrastructure challenges experienced by rural EMS providers.
 - Examine potential changes to the EMS scope of practice model to allow for the more timely and effective use of naloxone.
Support and fund the development of increased and higher level staffing capacity in rural EMS systems of care by addressing recruitment and retention issues, training inadequacies, and third party reimbursement.
- ***Expand the substance use workforce in rural communities***
 - Expose primary care professionals to substance use and opioid treatment during training.
 - Extend eligibility for National Health Services Corps loan repayment and other programs to licensed/certified substance use professionals.
 - Develop state and local loan repayment and scholarship programs.
 - Develop mentoring programs.
 - Recruit rural students interested in pursuing careers as substance use professionals.
- ***Promote use of evidence-based prescribing guidelines developed by appropriate professional organizations***
 - Develop broad-based coalitions representing diverse professional disciplines to develop and disseminate opioid prescribing guidelines targeting primary care and specialty practices. Incorporate state prescription drug monitoring programs into prescribing guidelines as a recommended best practice.
 - Develop coalitions from emergency medicine, pain management, and other disciplines to develop and disseminate emergency department opioid prescribing guidelines (including the concept of an “oxy-free zone” with limits on prescriptions of oxycodone and related medications (except in the case of specific medical situations) and replacement of lost or stolen opioid prescriptions) (e.g., Washington State ED prescribing guidelines).
 - Revise patient satisfaction systems (e.g., HCAHPS and others) to more appropriately reflect methods of assessing patient satisfaction with provider pain management.
 - Encourage state licensure boards and/or regulatory authorities to implement dissemination and education strategies specifically targeting rural providers including the use of telemedicine and video technology. Incentivize the use of best practices.
 - Develop peer-education programs (through state medical society’s and/or hospital systems) to educate and assist rural primary care providers in adopting appropriate prescribing practices (based on evidence-based prescribing guidelines).

- Supplement these efforts with overdose prevention programs targeting patients using legitimately prescribed opioids as well as illicit users of opioids.
- Use telehealth-based strategies such as the University of Washington-Division of Pain Management’s TelePain project (a “Project Echo” style program providing weekly pain management case consultation support and “ground rounds”) to enhance the skills of rural primary care providers to manage complex chronic pain patients. Provide funding support to sustain of these programs. Explore alternative resources to support these programs in rural communities from health systems, networks, and state medical schools.
- ***Strengthen state prescription drug monitoring programs (PDMPs) and greatly strengthen sharing of prescription information across state lines***
 - Implement stronger participation requirements for prescribers including efforts to simplify registration and use.
 - Develop proactive notification processes to alert providers to prescribing issues.
 - Strengthen use of PDMPs as part of opioid prescribing guidelines.
 - Link PDMPs to health information exchanges and/or provider electronic health records to improve reporting and ease access to PDMP systems. Use health information technology to inform real-time decision-making and support surveillance efforts to track prescribing and use practices as well as health outcomes.
 - Greatly strengthen cross-state cooperation among PDMPs to address the needs of providers treating patients across state lines by providing funding and technical assistance incentives to improve collaboration and data sharing. Task the Office of the National Coordinator with responsibility for encouraging and overseeing PDMP data sharing activities.
 - Encourage research and evaluation to support the accomplishment of the above objectives in rural communities as well as to encourage the expanded use of PDMPs as a clinical tool for providers to improve care for patients with acute and chronic pain.
- ***Support increased public health engagement in addressing opioid and related HIV and HCV issues***
 - Given the substantial risk for the transmission of HIV and HCV through intravenous opioid use, increase public health surveillance of prescription opioid and heroin use in rural communities to track populations of users; methods use (e.g., injection, inhalation, and smoked); types of opioids used; and rates of HIV and Hepatitis-C prevalence in these populations. Develop “early warning systems” to detect changes in HIV and HCV transmission rates at the community level and develop rapid response systems to intervene.
 - Encourage local public health departments to engage with and play a substantive role in community-based prevention, harm-reduction, and overdose prevention programs.
 - In the absence of existing prevention, harm reduction, or opioid education programs, encourage local public health departments to undertake the development of these programs. Provide tools, education, resources, and funding to support their involvement in these strategies.
 - Improve access to infectious disease services in areas impacted by outbreaks of HIV and HCV.

- ***Support availability of recovery and peer support services***
 - Collaborate with partner organizations included the National Association for Rural Mental Health, the National Association of County Behavioral Health & Developmental Disability Directors, and SAMHSA to identify/adapt models of peer recovery and support for opioid users in rural communities. Such models may include the Vermont Recovery Network, the Project Lazarus-sponsored Lazarus Recovery services which includes peer-specialists, 12-step programs, and a women's halfway house to transition patients back to the community, Alaska's rural peer support services, and the Recover Project in Franklin County, MA.
 - Explore the use of telehealth technology to provide access to peer recovery and support programs through collaboration with the Addiction Technology Transfer Center Network.
- ***Expand use of substance use treatment as an alternative to incarceration for opioid users***
 - Explore the use of models that offer non-violent drug offenders an alternative to prosecution such as Vermont's pre-trial assessment program; the Gloucester, Massachusetts Police Department's Volunteer Angel Program; the Scarborough, Maine Police Department's Project HOPE (Heroin-Opiate Prevention Effort); and Rutland, Vermont's Project Vision.
 - Engage rural law enforcement officials (e.g., the National Center for Rural Law Enforcement at the University of Arkansas and the Division of State Associations of Chiefs of Police), public health officials, and substance use professionals in a process to study and adapt these models for use in rural communities.
 - Create a model program that can be adopted by rural communities. Disseminate educational materials through State Rural Health Associations and state law enforcement agencies.

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