Strategies to Combat Opioid Use in Rural Communities

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Recommended Citation
Gale J. Strategies to Combat Opioid Use in Rural Communities. Presented at the Rural Health Research Gateway webinar; January 18, 2018; Webinar.

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Strategies to Combat Opioid Use in Rural Communities

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Rural Health Research Gateway Webinar
January 18, 2018

UNIVERSITY OF SOUTHERN MAINE
Muskie School of Public Service

Acknowledgements

Support for this work was provided by the Federal Office of Rural Health Policy within the Health Services and Resources Administration.

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Strategies study: John Gale, Anush Hansen, Martha Elbaum

Prevalence study: Jennifer Lenardson, John Gale, Erika Ziller
Topics to Be Covered

• Key take away messages
• Opioid use across rural settings
• What is different about rural areas?
• Drivers of rural opioid use
• Burden of opioid use in rural communities
• Evidence-based prevention, treatment, and recovery strategies to address rural opioid use

Key Take Away Messages

• It takes a village - Community engagement and involvement are central to addressing opioid use
• Opioid use is common in rural areas and driven by a complex mix of socioeconomic issues
• Rural area suffer disproportionately from these issues
• Travel barriers and isolation exacerbate these problems
• Significant gaps exist in substance use prevention, treatment, and recovery in rural communities
• Models must be adapted to the geographic, resource, and cultural realities of rural areas
Opioid Use – A Complex Problem

• The good:
  – A class of prescription medications providing significant benefits to patients with acute severe pain

• The bad:
  – Undue influence of pharmaceutical companies
  – Early failure to acknowledge the risks of prescription opioids
  – Slow adoption of evidence-based prescribing guidelines
  – Growing patient demand for opioids

• Complications:
  – Direct linkage between prescription opioid and heroin use
  – Multiple, interrelated pathways to opioid addiction

Rural Opioid Issues

• Opioid use is the primary cause of unintentional drug overdose deaths

• Several rural states are experiencing the highest rates of overdose deaths - WV, NM, NH, and KY

• Misuse of pain relievers is higher among rural youth, women who are pregnant or experiencing partner violence, persons with co-occurring disorders, and felony probationers

• Heroin use has begun to migrate away from urban communities and now more typically occurs in small urban or non-urban areas

• Prescription opioid and heroin use are strongly linked
Rural Persons Who Used Opioids in the Past Year Are More Likely to Have Socio-Demographic Vulnerabilities Than Urban Persons

<table>
<thead>
<tr>
<th>Vulnerability</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 12-19</td>
<td>22.1%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Fair or poor health</td>
<td>16.6%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Less than high school education</td>
<td>21.6%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Less than $20K</td>
<td>29.3%</td>
<td>23.7%</td>
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<tr>
<td>Uninsured</td>
<td>29.1%</td>
<td>25.1%</td>
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</tbody>
</table>

Residence differences significant at p < .001

Rural Heroin Users Were Less Likely Than Urban to Perceive Risk in Trying Heroin 1-2 Times

<table>
<thead>
<tr>
<th>Group</th>
<th>Rural Overall</th>
<th>Urban Overall</th>
<th>Rural Men</th>
<th>Urban Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Risk</td>
<td>39.8%</td>
<td>55.9%</td>
<td>32.0%</td>
<td>53.1%</td>
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</tbody>
</table>

Residence differences significant at p ≤ .05.
Factors Associated with Rural Opioid Use

• Controlling for: residence, age, sex, race/ethnicity, health, education, marital status, employment, health insurance & income, rural persons:
  – Were 20% less likely to have past year opioid use than urban
  – Ages 12-19 were 70% more likely to use opioids than 30-49
  – Under 30 had higher odds of opioid use than 30 and over
  – Who were married had 40% reduced odds of use compared to rural persons who were not married
  – Males were 30% more likely than females to use opioids
  – In poor health, with limited education, and no health insurance had higher odds of opioid use
  – Who were uninsured had 58% higher odds of opioid use compared to those with private coverage.

Socioeconomic Drivers of Rural Opioid Use
Role of Rural Place as a Driver of Opioid Use

- Rural places suffer from a variety of health and socio-economic disparities
  - Greater sense of stigma
  - Higher sense of isolation and hopelessness
  - Lower education rates
  - Higher rates of poverty
  - Fewer opportunities for employment
  - Higher rates of chronic illnesses
- Influence of cultural, ethnic, religious differences

Risk Factors for OU

- Family history of substance abuse
- Personal history of substance abuse
- Young age
- History of criminal activity and/or legal problems
- Regular contact with high-risk people or environments
- Mental disorders
- Risk taking or thrill seeking behavior.
- Heavy tobacco use.
- History of severe depression or anxiety.
- Psychosocial stressors.
- Prior drug and/or alcohol rehabilitation
Interaction between Opioid Use and Risk Factors

- Opioid use is driven by socioeconomic factors
- It also contributes to a self-perpetuating cycle that is difficult to break
- Individuals with opioid use disorders have lower levels of academic achievement, arrest records, greater rates of poverty, etc.
- Intergenerational substance use
- Intergenerational trauma
- Stigma plays a crucial role

Other Rural Issues

- Long standing issue in rural communities
- Non-medical use of prescription opiates in rural areas
- Heroin as a substitute for prescription opioids by those without health insurance – Maine
- Major initiatives– Vermont, Ohio, other rural states
- Heroin is cheap, accessible, and stronger
- Limited treatment & law enforcement resources
- Substantial variations in opioid prescribing rates
Policy Implications

• Despite social vulnerabilities, rural opioid users have slightly lower prevalence rates than urban opioid users
  – Social ties, support, and other buffers may protect rural residents from even higher prevalence rates
• Prevention efforts have not effectively reached rural residents – especially young people and men – who do not perceive risks from heroin use
• Harm reduction and syringe exchange programs are also important, though far less common, in rural areas
• Significant efforts to manage opioid prescribing rates are needed

A Public Health Model for OU

• Systematic data collection on scope, characteristics, and consequences of substance misuse
• Identify risk and protective factors for OU and factors that could be modified through interventions
• Collaborative efforts to address social, environmental, or economic drivers of OU
• Effective prevention and treatment interventions and recovery supports in a wide range of settings
• Monitor the impact of interventions on OU, related problems, and risk and protective factors
• Community leadership that mobilizes community organizations and resources to address OU
Community Strategies

- Key to addressing the problem at the local level
- Important components
  - Broad-based support and engagement
  - Stigma reduction
  - Prevention
  - Harm reduction – naloxone and needle exchanges
  - Engaged law enforcement that avoids criminalizing users
  - Engaged providers using evidence-based prescribing guidelines and offering medication assisted therapy
  - Access to evidence-based treatment services, integrated with mainstream health care
  - Peer support and recovery services

Engaging Hospitals and Primary Care Providers

- Problems are not limited to opioid use only, but include many other health and safety problems
- Hospitals, emergency departments, and primary care contribute to the opioid problem through prescribing practices
- Tax-exempt and publicly owned hospitals have an obligation to address unmet community needs
- Rural hospitals and primary care providers can play an effective role in addressing opioid use by filling gaps in specialty care system
- It provides an opportunity for collaborative action by hospitals, medical, and community stakeholders
Barriers to Treatment Access in Rural Areas

- Fewer facilities
- Lower treatment access in rural areas
- Geographic barriers
- Less anonymity
- Limited public transportation
- Stigmatization and criminalization
- Fewer treatment professionals

Barriers to OU Treatment

- Poor coverage for MAT services – OTPs are cash only services in some states
- Services are often clustered around urban centers – requiring long travel distances for rural residents
- Many buprenorphine providers operate below capacity
- MAT services are not enough – substance use, mental health, care coordination are needed
- Greater attention is needed on what happens after treatment – peer support and recovery services are needed to reduce likelihood of relapse
Prevention Strategies

Important Strategy Area # 1 - Prevention
• Opioid harms not restricted solely to those using heroin or misusing prescription medications
• Discourage/delay onset of OU
• Minimize related high risk behaviors
• Focus on children, adolescents, and young adults
• Community focused strategies
  – Community organizing and education
• Provider focused strategies
  – Reducing supply of opioids prescribed
  – Use of prescription drug monitoring programs
  – Offer alternative pain-management strategies
  – Provide opportunities to dispose of unneeded medications
Prevention

- A primary component of a health-centered system to address OU use
- Evidence-based (EB) prevention programs effectively prevent initiation, harmful use, and related problems
- Prevention is cost-effective at different stages of life
- Must be adapted to the unique context of each community with fidelity to the intervention on which the evidence is based
- Communities are an organizing force to bring effective prevention programs to scale
- Key: Cross sector community coalitions to assess local risk and protective factors, OU problems, and implement interventions to match local priorities

Activities to Engage Communities

- Community Organization and Engagement
- Prescriber education and behavior
- Supply reduction and diversion control
- Pain patient services and drug safety
- Drug treatment and demand reduction
- Harm reduction
- Community-based prevention education
Key elements of effective community coalitions

- Understanding the community’s needs and resources
- Widely shared and comprehensive vision
- Clear and focused strategic plan
- Diverse membership: key community leaders, local government officials, and volunteers
- Strong leadership and committed partners
- Diversified funding
- Well-managed structure: organized administration, effective communication among participants, and a comprehensive evaluation plan

Evidence-based community organizing models

- Project Lazarus -
  - In all North Carolina Counties
  - In rural communities across the country - Project Bald Eagle, Williamsport, PA. Winnebago County Heroin Task Force in Wisconsin, Clark County Collaborative in Ohio, and Washtenaw Health Initiative Opioid Project in Michigan
- Project Vision, Rutland, VT
  - Uses a Drug Market Intervention model and community collaboration/engagement to reduce the supply of opioids
- SAMHSA’S Recovery Oriented Systems of Care
- Communities That Care
Project Lazarus – Hub Activities

• Hub activities are central components supporting all other activities and reflect a community-based, bottom-up public health approach
  – Build public awareness of substance use through broad-based educational efforts and the use of local data to drive awareness
  – Coalition building and action to engage a broad range of community providers, agencies, and organizations
  – Identify data needs for planning and evaluation to build awareness, tailor programs to local needs, track progress, and sustain support and funding

Project Lazarus – Spoke Activities

• Spoke activities are optional areas of evidence-based prevention initiatives that communities can select and reflect a medical and law enforcement-based, top-down public health approach
  – Community education
  – Provider education
  – Hospital emergency department policies
  – Diversion control
  – Pain patient support
  – Addressing the consequences of use
  – Addiction treatment
Project Vision – Addressing Supply Issues

- Project Vision, Rutland, VT
  - Goals: empower communities, strengthen neighborhoods, help people, change the future
  - Committees: Crime/Safety, Substance Abuse, Community/Neighborhoods/Housing
  - Use a Drug Market Intervention model and community collaboration/engagement to reduce the supply of opioids (heroin and illicitly distributed prescription opioids) in rural Rutland VT

Health care providers in different states prescribe at different levels.
Prescriber Education and Behaviour

- One-on-one prescriber education on pain management
- Continuing medical education on pain management
- Licensing actions against criminal prescribing
- Implement and monitor evidence-based prescribing guidelines among all providers
  - CDC guidelines, state programs such as Washington state
- **Strongly** encourage use of prescription drug monitoring programs
- Think about an “oxy free” emergency department
- Harm Reduction - Naloxone and Opioid user education on overdose prevention and response

Hospital Prevention Strategies

- Participate in community-based prevention programs as part of hospital’s community benefit and/or community/population health initiatives
- Quality improvement: Focus on supply reduction
  - Prescribing guidelines
  - Encourage greater use of prescription drug monitoring programs
  - Use Project ECHO to support prescribing and pain management capacity of local providers
  - Implement an “oxy-free” emergency department
  - Engage in harm reduction strategies
Midcoast Maine Prescription Opioid Reduction Program

- Implemented opioid prescribing guidelines for dental pain in two rural EDs in Maine
- Driven by ED chairman with input from physician group
- ED patients who request refills of controlled prescriptions, have multiple controlled substance prescriptions, or have multiple previous ED visits for painful conditions
- Guidelines recommend the use of analgesic alternatives such as nerve blocks and immobilization
- Results after 12 months - reductions in rates of opioid prescriptions and visits for dental pain

Oxy-Free Emergency Departments (EDs)

- EDs are a significant source of opioid prescriptions and a frequent target for those seeking opioids
- ED prescribing developed by the Washington State Department of Health, the WA College of Emergency Physicians and the WA Hospital Association
- Included limitations on the prescription of opioids in EDs and the concept of an “oxy-free zone”
- Lower rates of ED visits by “frequent users” with low acuity diagnoses seeking opioids
- WA Medicaid estimated $33.6 million in ED savings
- Hospitals are pleased with the strategy but some experienced early reductions in patient satisfaction scores related to pain management
“Oxy-Free” EDs – McKenzie Health System

- In February 2013, McKenzie Health System's ED discontinued dispensing narcotic and sedative medications for complaints of chronic pain
- Results – 60% reduction in opioid prescription abuse within a 12 month period and reduced utilization of unnecessary and costly diagnostic work-ups
- Staff met with community mental health officials, county health officials, local primary care providers, law enforcement, pharmacies to explain the initiative
- Engaged in patient education

“Oxy-Free” EDs – McKenzie Health System (con’t)

- Process:
  - Thorough medical exam to rule out medical emergencies
  - Review of patient’s complete file, including internal health records, outside health records, drug screening tests
  - If patient presents with a chronic pain condition or suspected narcotics abuses, physician will inform patient of the dangers of narcotic drug abuse and may not prescribe a narcotic pain medication
  - May receive a non-narcotic pain medication and information about O/SU programs and/or pain management specialists
  - If a narcotic pain medication is prescribed after careful review by the physician, it is only for a very limited amount of pills, until the patient can be seen by his or her physician
Reducing Opioid Prescribing by Providing Pain Management Services

- Due to the limited availability of pain management services in rural communities, many providers rely on prescription opioids as a primary treatment modality.
- Rural primary care providers often have limited experience with the management of chronic pain.

Strategies
- Expand access to pain management services through contracts and/or telehealth.
- Improve the capacity of local providers to manage pain through use of program such as Project ECHO.

Expanding Local Pain Management Services: Salem Township Hospital

- Salem Township recruited a pain specialist to travel an hour from Marion, Ill., twice a month to treat patients.
  - Considering expansion to three to four times a month.
- Patients are seen in one hour increments.
- Provides trigger-point injections for long-term pain and promotes physical therapy and alternative treatments.
- Patients continuing with opioids must agree to regular drug tests and not ask for early refills.
- Over 3 to 4 months, only 3 out of 56 patients have chosen to stick with opioids.
- Minimal investment - $25,000 for capital equipment.
Telehealth-Based Pain Management Program: Martha’s Vineyard Hospital (MVH)

- Due to its island location off Cape Cod, MVH worked with Massachusetts General Hospital’s Center for Pain Management to offer a pain service via telehealth
- MGH providers see patients in a telepain clinic 3 days per month and conduct on-site visits twice per month
- Services include initial consults and follow-up visits
- Vital signs/patients notes are recorded in a shared EHR
- An RN, trained in physical examination of pain and medical management, performs patient exams under direct physician supervision via live videoconference and also verbally announced all findings

Telehealth-Based Pain Management Program: Martha’s Vineyard Hospital (con’t)

- Physical examinations are repeated by the physician during on-site visits prior to patient intervention
- Laboratory data and imaging studies are reviewed in the shared HER
- Over 13 months, 49 patients participated in 238 telepain video clinics and 121 on-site interventions
- Patients report reduced travel costs, improved access to care, and general satisfaction with the service
- Patients rated their satisfaction with care received by telepain lower than in-person visits and thought it harder to develop a relationship with the doctor
- This highlights the challenge of building a patient-physician relationship remotely
Important Strategy Area #2 - Treatment

- Implement consistent OU screening for all patients
- Develop referral relationships with SU/MH providers
- Explore local treatment opportunities
  - Medication assisted treatment – buprenorphine
  - Integrated behavioral health/SU/primary care services
  - Specialty substance use services
- Collaborative treatment programs – hub and spoke
- Explore use of technology to expand access to care
- Overdose reversal programs
- Alternative pain management programs
- Work with law enforcement to provide a treatment alternative to incarceration
Provider Strategies and Treatment Services

• Rural residents deserve the same level of access to the full range of substance use treatment services as urban residents

• Substance use is a chronic, relapsing disease
  – Requires ongoing level of services
  – Reflects a primary care-based system of care framework
  – Conserves resources by matching services to patient needs using a level of care criteria
  – Professionally-directed, post-discharge care can enhance recovery, but relatively few receive such care
  – Distance to services is correlated with treatment completion (longer travel distances are associated with lower rates of completion)

Definition of a System of Care

• An integrated spectrum of effective, community-based services and supports for rural people and their families at risk for or struggling with OU challenges
  – Organized into a coordinated network
  – Builds meaningful partnerships with individuals and their families
  – Addresses their cultural and linguistic needs, to help them function better at home, in school, in the community, and throughout life.
Structure of Treatment Services

- Use of a regional orientation/model
- Reflects the realities of rural resource limitations
  - Uses technology (e.g., telehealth, mobile phones, etc.) to address distance barriers and maldistribution of resources across urban and rural areas
- Integration across services systems:
  - Substance use,
  - Mental health, and
  - Primary care

Principals for Treatment

- Treatment must be available, accessible, attractive, and appropriate for needs
- Ethical standards must be observed
- Requires effective coordination between the criminal justice system and health and social services
- OUDs should be viewed as a health problem rather than criminal behavior: users should be treated in the health care rather than the criminal justice system when possible
Principals for Treatment (cont’d)

• Based on scientific evidence and respond to specific needs of individuals with OUDs
• Should respond to the needs of special subgroups and conditions
• Should ensure good clinical governance of treatment services and programs for OUDs
• Integrated treatment policies, services, procedures, approaches and linkages must be constantly monitored and evaluated

Opioid Screening Tools

• Can be used across different health care settings
  – Screener and Opioid Assessment for Patients in Pain Revised (SOAPP-R)
  – Current Opioid Misuse Measure (COMM)
  – Opioid Risk Tool (ORT)
  – Diagnosis, Intractability, Risk, and Efficacy (DIRE)
  – Screening Instrument for Substance Abuse Potential (SISAP)
  – (vi) The Pain Assessment and Documentation Tool (PADT)
Bridgton Hospital Buprenorphine Clinic

- Coordinated efforts between Bridgton Hospital, North Bridgton Family Practice, Crooked River Counseling
  - Program has enrolled 200 patients in a rural Maine community
  - Started in 2009
  - Four physicians and two nurse practitioners prescribe buprenorphine in their primary care practice (North Bridgton)
  - Crooked River Counseling provides intensive outpatient counseling and group therapy for the patients
  - Bridgton Hospital provides comprehensive maternity care to women with OUD during their pregnancy
  - Services are interconnected and coordinated across providers
  - Key is the collaborative approach and communication

Bridgton Hospital Buprenorphine Clinic

- Benefits
  - Lower regulatory/licensure barriers than methadone programs
  - SAMHSA prescribing waiver is comparatively easy to obtain
  - Can be integrated into primary care system
  - Gold standard of treatment for opioids
- Challenges
  - Buprenorphine alone is not sufficient to meet all patient needs
  - Can be difficult to incorporate into a busy practice without additional support
  - Linkages with bigger systems of care are needed
Supporting MAT and OUD Services - Vermont

- Vermont’s Hub and Spoke model supports the use of buprenorphine by primary care and community providers
  - Comprehensive care management
  - Care coordination and referral to local resources
  - Care transitions
  - Individual and family supports
  - Health promotion
  - Expands use of buprenorphine in primary care
  - Recognizes importance of mental health and traditional substance use services in treating opioid problems
  - Efficient use of scarce resources
  - Provides care in less stigmatizing settings

Vermont Hub and Spoke (cont’d)

- Regional specialty treatment centers serve as the hubs
  - Coordinate care of individuals with complex OUDs and co-occurring SU and MH disorders
  - Provide full range of OUD care and support community providers by providing consultative support to primary care and other providers prescribing buprenorphine
- Physicians prescribing buprenorphine and collaborating health and addictions professionals serve as the spokes
  - Dispense buprenorphine, monitor adherence to treatment, coordinate access to recovery supports, and provide counseling, contingency mgt, and case mgt services
- Funded through Medicaid waiver
Important Strategy Area # 3 - Recovery

- The third and often overlooked strategy to address OU disorders
- Provide support through programs or a structured milieu to support sobriety and substance free living
- Ideally, recovery begins before treatment
- Addresses social, rehabilitation, and vocational issues
- Provides a community to reinforce sobriety
Recovery

• “Recovery is a process of change through which an individual achieves abstinence and improved health, wellness and quality of life.” SAMHSA

• Four dimensions that define a healthy life in recovery:
  – Health - Managing one’s disease(s) or symptoms; making informed choices that support physical/emotional wellbeing
  – Home – Having a safe and stable place to live
  – Purpose – Participating in meaningful daily activities and having the independence, income, resources to participate in society
  – Community – Engaging in relationships and social networks that provide support, friendship, love, and hope

• Hospitals can coordinate with local recovery programs

Recovery – Community Programs

• Does community create a supportive environment for recovery?
  – Stigma reduction – opportunities for a new start
  – Employment opportunities
  – Educational opportunities
  – Social, recreational outlets
  – Connection to cultural heritage
  – Twelve step programs
  – Peer support
Evidence-Based Recovery Programs

• Department of Veteran’s Affairs – Peer Recovery
  – Recruit veterans in recovery to support those going through the process

• Australian mental health peer support
  – Goal – avoidance of unnecessary hospitalizations

• Turning Point Center, Rutland, VT
  – Part of the Vermont Recovery Network

• Supporting Peer Recovery: The RECOVER Project, Franklin County, MA

• Project Angels, Gloucester, MA
  – Provides treatment as an alternative to incarceration

Challenges to Developing Rural Programs

• Programs “imported” from outside the local area are often viewed with suspicion

• Community-based programs are important to create locally developed, culturally appropriate interventions
  – Must be sensitive to local cultural, religions, and ethnic issues (cultural humility) and engage local leaders
  – Limited opportunities after treatment, stigma, restricted social supports frequently leads to relapse – must support sober living

• Continuum of prevention, treatment, and recovery services must be developed simultaneously to address the needs of rural residents “where they are”
Recommendations

• The Community is key!!
• Support the development and implementation of community coalitions - Project Lazarus or Project Vision
• Engage providers, businesses, schools, residents, law enforcement
• Conduct broad-based education on the dangers of opioids
• Build a local system of care that integrates prevention, treatment, and recovery and engages mental health, and substance use providers
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