Innovations in Rural Health System Development

Maine's Behavioral Health Services

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Rapid changes in health care payment and delivery systems are driving health care providers, payers, and other stakeholders to consider how the current delivery system might evolve.

This series of briefs profiles innovative rural health system transformation models and strategies from Maine and other parts of the United States. The aim is to assist rural communities and regions to proactively envision and develop strategies for transforming rural health in the state. In preparing these briefs we consulted experts, interviewed key informants, and reviewed the professional and research literature to find robust and innovative models and strategies that could be replicated in rural Maine.

PROMISING STRATEGIES:

INTRODUCTION

This brief presents innovative approaches to the provision of treatment for mental and/or substance use disorders—which are referred to jointly in this brief as behavioral health disorders—in rural areas. The National Rural Health Association suggests implementing multi-pronged programmatic and policy approaches to increasing access to behavioral health services that address the "four As"—availability (workforce shortages), accessibility (knowledge of available services and travel barriers), affordability (cost or services and availability of health insurance), and acceptability (stigma and privacy concerns).[1] The four As highlight the primary barriers to accessing behavioral health services in a rural area, and the examples included in this brief speak to these challenges.

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Although the prevalence of mental disorders is similar in rural and urban areas at the national level,[2] the experience of living with mental illness is different in rural versus urban areas as evidenced by higher suicide rates,[3] lower rates of use of office-based mental health services,[4] and higher rates of prescription use in rural areas.[4,5] Both rural and urban communities are also struggling to address the opioid abuse crisis. A national comparison of opioid abuse in rural versus urban areas found that although prevalence of past year use of non-medical pain reliever and heroin was slightly lower among rural residents, the magnitude of the difference was small.[6] Rural heroin users were less likely than urban heroin users to have received treatment for heroin use and rural opioid users were more likely to be uninsured, have poor health status, low educational attainment, and to have been involved with law enforcement compared with urban opioid users.[6]

Behavioral Health in Maine

The percentages of Maine residents who self-report living with various behavioral health disorders[1] are similar to national averages.[7] However, the percentage of Maine adolescents aged 12-17 who report illicit drug use is higher than the national average (11.1 percent vs. 9.2 percent).[7] Maine is one of 14 states that had a statistically significant increase in drug overdose deaths between 2013-2014—with the third largest percent increase in deaths (27.3 percent) behind North Dakota and New Hampshire.[8] The trend continued between 2014-2015, when drug-induced deaths in Maine increased 31 percent from 208 to 272, with 58 percent of the deaths due to heroin or fentanyl.[9] Although drug-induced death rates are highest in urban Cumberland, York, Androscoggin, Kennebec, and Penobscot counties, drug-induced deaths took place in every Maine county in 2015.[9]

Access to Care in Maine

Despite the state's average to slightly above average rates of provision of behavioral health services compared with the nation, accessing behavioral health services in Maine's rural communities is hindered by shortages of behavioral health providers and the scarcity of mental health and substance use disorder treatment facilities. Overall, Maine fares slightly better than the nation overall regarding provision of treatment to individuals with behavioral health disorders. The state has a higher percentage of adolescents with a major depressive episode receiving treatment (47.7 percent) and a higher percentage of adults with any mental illness receiving treatment (52.6 percent) compared with national averages for these measures.[7] Regarding substance use disorders, the percentages of Mainers with alcohol dependence and illicit drug dependence receiving treatment in 2009-2013 (8.6 percent and 19 percent, respectively) are similar to national averages over the same time period.[7]

Maine's behavioral health workforce is concentrated in the state's urban areas. Although 41 percent of Maine residents live in urban Cumberland, Penobscot, and Androscoggin counties, these counties are home to 70 percent of health care social workers and 69 percent of mental health and substance abuse social workers.[10] Federally designated mental health professional shortage areas are located in sections of rural Aroostook, Piscataquis, Washington, Somerset, and Oxford counties, as well as urban Penobscot and Cumberland counties—which speaks to the concentration of the behavioral health workforce in the cities of Bangor and Portland within those counties.[11] Maine has fewer clinical, counseling, and school psychologists per capita than the nation overall and nearly 70 percent of those psychologists are 50 or older.[10]

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[1]Specifically, serious mental illness, illicit drug use, binge alcohol dependence, and heavy alcohol use among adults, as well as adolescents reporting binge alcohol use, a past year major depressive episode, and thoughts of suicide.

Maine's Behavioral Health Homes, a care coordination initiative promoted by the Department of Health and Human Services, are located predominantly in urban areas.[12] Additionally, Washington and Knox counties are the only rural counties in the state with a methadone clinic.[12]

PROMISING STRATEGIES

Care Coordination and Integration

What is care coordination and integration?

The increased mortality and morbidity among individuals with serious mental illness is largely due to preventable, chronic conditions including diabetes, cardiovascular disease, and infectious disease.[13] Among individuals with serious mental illness, treatment of co-occurring health issues often happens in inappropriate and expensive settings like emergency departments rather than through preventive screenings and routine medical care.[14]

The integration of physical and behavioral health care can take different forms. Methods of integration include: universal screening (primary health care providers screen for behavioral health needs and vice versa), the use of navigators to help those with behavioral health issues access medical care and advocate for their needs, co-location of behavioral and physical health providers, and care coordination initiatives such as Health Homes—an initiative authorized by the Affordable Care Act that supports integration of primary, acute, behavioral health, and long-term services and supports for individuals with chronic conditions who are covered by Medicaid.

KEY FACT about care coordination and integration in Maine:

- MaineCare, the state's Medicaid program, has undertaken a *behavioral health homes initiative*. A Behavioral Health Home Organization is a licensed community mental health provider that partners with one or more medical Health Home practices to coordinate the physical and behavioral health care of eligible adults and children. Both the mental and physical health provider receive a per member, per month payment for Health Home services provided to enrolled members.

PROMISING STRATEGIES AND MODELS

EXAMPLE: SBIRT (Screening, Brief Intervention, and Referral to Treatment) is an evidence-based, comprehensive, public health approach to the delivery of early intervention and treatment services for individuals with a substance use disorder and those at-risk of developing a substance use disorder. The first component of SBIRT—screening—entails a health care professional screening a patient for risky substance use behaviors using a standardized screening tool. Screening can occur in any health care setting including primary care practices, student health centers, and emergency departments. Standardized screening tools are used during the first phase of SBIRT. The second component of SBIRT is a brief intervention—a short conversation between the health care provider and patient about any risky behaviors being exhibited by the patient. The third component is a referral to appropriate treatment for those in need of additional services.

All Health Homes in Maine are required to have substance abuse screening incorporated into their practice—but SBIRT is not widely or consistently used in the health care system overall. Maine Quality Counts has developed a robust collection of *SBIRT resources and tools for practices* interested in incorporating SBIRT into their work.

In 2012, the Vermont Department of Health received a grant from the federal Substance Abuse and Mental Health Services Administration to train practitioners in SBIRT. The Department trained 325 practitioners and in the first two and a half years of the program 34,000 Vermonters were screened for substance misuse in a medical setting. Although grant funding may be necessary to support robust SBIRT training, SBIRT services are reimbursed by Medicare and Mainecare (with a few restrictions on provider type and location).

EXAMPLE: Behavioral Health Services of the Shenandoah Valley Medical System (BHS) is a West Virginia-based behavioral health program co-located within a Federally Qualified Health Center (FQHC) that provides primary care services. Through co-locating primary and behavioral health care services BHS seeks to enhance care coordination and reduce the stigma of mental health treatment.. All patients that receive primary care in the FQHC are screened for behavioral health issues annually, and all new mothers receive post-partum screening. Any patient that receives a score above the cut off on a screening tool receives an on-the-spot behavioral health consultation with a member of the BHS staff. If the patient needs further treatment the provider registers the patient with BHS and they are seen for follow up in the same building. The providers in the FQHC and BHS communicate about patients during twice-weekly team meetings and through notes in patient electronic medical records. Roughly half of patients that are flagged for behavioral health consultation by their provider become regular BHS patients.

EXAMPLE: In 2013, the Vermont Department of Health's Division of Alcohol and Drug Abuse Programs and the Department of Vermont Health Access formally launched the **Care Alliance for Opiate Addiction (Hub and Spoke) Initiative**—an effort to integrate **Health Home services and medication-assisted treatment (MAT)** for individuals in Vermont's Medicaid population living with opioid use disorder.

The Hub and Spoke model consists of five "Hubs" across the state—regional specialty addiction treatment centers regulated as Opioid Treatment Programs (OTPs) and operated by community-based behavioral health agencies. The Hubs treat all participants in the initiative receiving methadone and the clinically complex participants receiving buprenorphine. Previously, OTPs were exclusively methadone providers, but under the initiative OTPs designated at Hubs are also allowed to prescribe buprenorphine. In addition to MAT services, Hubs provide the six Health Home services (care management, care coordination, health promotion, transitional care/follow up, patient and family support, and referral to community and social support services).

"Spokes" are teams of health care professionals in practices that are led by physicians who prescribe buprenorphine and are regulated as Office-Based Opioid Treatment Programs (OBOT). Just as with Hubs, Spokes have health care professionals that provide Home Health services embedded into their practice. Patients receive treatment at Hubs or Spokes depending on their method of MAT and the severity of their condition. As the outcomes of individuals receiving buprenorphine improve, their care is shifted from Hubs to Spokes.

The enhanced staffing model for the provision of Health Home services at Hubs consists of approximately six FTE clinical staff for every 400 patients in MAT. The enhanced staffing

level for Spokes is one FTE nurse and one FTE licensed clinical case manager for every 100 patients in MAT. Because most Spokes treat fewer than 100 patients, Spoke staff are shared across multiple practices.

Payments to Hubs and Spokes are administered by the Department of Vermont Health Access and—because the Hubs and Spokes provide services that are reimbursable under Vermont's State Medicaid plan or Health Homes funding—build upon existing payment structures. Hubs receive a monthly, bundled payment per patient. Spoke physicians receive fee-for-service payments from the state's Medicaid plan for the provision of buprenorphine treatment, while Spoke nurses and clinical case managers providing Health Home services are paid based on the number of unique patients with a buprenorphine claim paid by Medicaid within their health service area.

Example: The Downeast Maine Substance Treatment Network (Network), a group of stakeholders including health care providers, law enforcement officials, nonprofit agency staff, hospital executives, and government officials convened by Healthy Acadia—the Healthy Maine Partnership serving Hancock and Washington counties—is in the process of developing a regional system of substance use disorder treatment for opioid addiction. The Network's emerging Opioid Treatment Hub and Spoke model aims to connect individuals with opioid use disorder to a network of local providers of MAT and coordinate care for those individuals.

As designed, after individuals are initiated in treatment and stabilized at a "Treatment Hub," they will be connected to "Spokes" of health care providers in the community for continued treatment. The Hub will further coordinate care if needed. The Hub is scheduled to open in fall 2016. The Network is also developing regional treatment guidelines to create a more coordinated system for treatment and referrals in the region, including a list of substance treatment providers and complementary community resources in the Hancock County region.

In addition to grant funding through Healthy Acadia, three area hospitals (Blue Hill Memorial Hospital, Maine Coast Memorial Hospital, and Mount Desert Island Hospital) will dedicate funding to the Hub.

Considerations for application in Maine

- Ongoing financial and technical support to physician practices and behavioral health organizations will be needed to support appropriate screening and to build and sustain care coordination and integration initiatives.

- Co-location of physical and behavioral health providers can be difficult in rural areas and in small practices; sharing of mental health specialists across practices within geographic regions may be needed to ensure the financial feasibility of such arrangements.

- There is growing adoption of evidence-based models for effective substance use disorder prevention and treatment services in Maine and elsewhere. Expansion of these models will require financial and technical support.

Additional resources on integrated physical and behavioral health care:

- Maine Quality Counts SBIRT Resources: **https://www.mainequalitycounts.org/page/2-1153/screening-information-for-practices**
- American Psychiatric Association, Academy of Somatic Medicine. Dissemination of Integrated Care within Adult Primary Care Settings: The Collaborative Care Model: **http://www.integration.samhsa.gov/integrated-care-models/APA-APM-Dissemination-Integrated-Care-Report.pdf**

PROMISING STRATEGIES

Telemental Health Services

What are Telemental Healtlh Services?

Telehealth encompasses a number of methods for disease diagnosis, management, and patient education including live video, remote patient monitoring, and Mobile Health (mHealth) technology. Telehealth services are an appealing health care delivery model for much of Maine due to the state's rural geography, inclement weather, maldistribution of providers, and inadequate and/or costly transportation options. Research has shown that the application of telehealth approaches to the treatment of mental disorders, known as telemental health, has been found to be effective for diagnosis and assessment across populations and care settings.[15]

KEY FACTS about telemental health services in Maine:

- In an evaluation conducted by the American Telemedicine Association (ATA), Maine received a composite score of "A" for telemedicine coverage and reimbursement standards (one of nine states in the country to receive a top score), due in part to the state's telemedicine parity law for Medicaid and private insurance.[16]

- The organization gave Maine a composite score of "B" in regard to professional licensure portability and practice standards for providers using telemedicine.[17] Taken together, the ATA's scores suggest a high level of legislative and regulatory "friendliness" toward telehealth in Maine compared with other states.

- An April 2016 MaineCare rule change removed the requirement that providers obtain approval prior to using telehealth technology to treat a patient, making provision of telehealth services easier for providers.[18]

PROMISING STRATEGIES AND MODELS

EXAMPLE: Acadia Hospital (Acadia), a full-service psychiatric hospital located in Bangor, Maine, uses telepsychiatry to provide emergency department consults for a group of rural providers, including ten critical access hospitals, within a three hour radius of the hospital. Acadia has a 10-bed stabilization unit that is staffed with a psychiatrist 24 hours a day. The hospital has leveraged the fixed cost of having an overnight psychiatrist on staff through provision of telepsychiatry consults with remote, rural emergency departments. Acadia psychiatrists use two-way interactive videoconferencing to bring themselves face-to-face with remote patients for diagnosis and assessment. A typical telepsychiatry consult begins

when an emergency department provider calls Acadia to request a psychiatric consult for a patient at their site. Preparations for the psychiatry consult include assembling the necessary teams at both the remote site and Acadia, preparing the patient for the consult, and testing the videoconferencing connection. The care providers—both those at the remote site and at Acadia— conference to discuss the patient's case both before and after the psychiatrist at Acadia performs a patient interview via videoconference.

The objectives of the telepsychiatry consults are to reduce the time it takes for patients to receive appropriate care, provide expertise for risk management, and improve the patient experience and provider satisfaction. For example, the telepsychiatry consults allow psychiatric patients who are delayed in the emergency department for an extended period of time—due to a lack of available psychiatric beds at another facility or high acuity that prevents transfer—to begin treatment, including medication and symptom management, while in the emergency department.

An Acadia survey of telepsychiatry partner sites found that a majority of providers at those remote sites report that the telepsychiatry service improved their knowledge of behavioral health and increased satisfaction treating behavioral health patients.[19] Patients are generally comfortable with the telepsychiatry service, with only 1.2% of patients refusing teleconsults that have been set up.[19]

Acadia employs a Telecom Manager who troubleshoots technology issues. Acadia's videoconferencing hardware was purchased using grants from the Health Resources and Services Administration and the U.S. Department of Agriculture. The cost of services are covered through facility fees and professional fees reimbursed through insurance, as well as financial arrangements with partner facilities.

EXAMPLE: The Oklahoma Department of Mental Health and Substance Abuse Services developed a Statewide Telehealth Network—the first of its kind—to provide behavioral health services via videoconference throughout the state. Telehealth services are provided to a network of 140 sites throughout rural Oklahoma including hospitals, clinics, community mental health centers, and state penitentiaries. The State contracts with psychiatrists at hospitals to provide services through the telehealth network. Over 500 licensed providers are in the Network, and over 30 hours of videoconferencing take place across the Network each day.

The State estimates $190,000 in monthly savings due to decreased travel time for providers and increased productivity. The Statewide Telehealth Network was originally grant funded, but telehealth services are now a line item in the state budget. The State covers the salary of a State Coordinator who installs telehealth systems and promotes the Network.

EXAMPLE: Project ECHO is an evidence-based initiative led by the University of New Mexico (University) that uses telehealth technology to connect medical specialists at the University with primary care providers that serve rural and/or underserved communities, thereby improving clinical care and decreasing the isolation of providers in rural areas.

The model was first rolled out in 2003 with an emphasis on the treatment of hepatitis C, and has since expanded to other conditions including addictions and psychiatry. Project ECHO's recent complex care initiative targets Medicaid beneficiaries with behavioral health disorders and other chronic conditions who were heavy utilizers of the health system. The

five primary care teams taking part in the initiative (each led by a nurse practitioner or physician assistant, and including community health workers) are located at community primary care clinics throughout New Mexico. The primary care teams are supported by experts at the University (including a psychiatrist, and a physician and counselor that specialize in addiction treatment) during two-hour bi-weekly videoconferences. During the videoconferences experts from the University give short presentations on relevant topics and offer recommendations on challenging cases presented by the care teams. Experts are also available over phone and email in-between videoconferences. In the first year of the program the number of hospitalizations among participants decreased 27 percent; emergency department visits decreased 32 percent; per member, per month cost decreased; and patients reported better access to care and better care experiences.[20]

Considerations for application in Maine

- Reliable delivery of telehealth and telemental health services to rural areas of the state depends on the availability of broadband internet—which is slowest in rural Piscataquis, Franklin, and Somerset counties and not available in some rural areas of Maine.[21]

- Although Maine's telehealth reimbursement policies make financially stable, non-grant funded provision of telehealth services possible, smaller provider organizations will need technical support to plan for and implement telemental health services.

Additional resources on telemental health services:

- Northeast Telehealth Resource Center: **http://netrc.org/**
- Rural Health Information Hub: **https://www.ruralhealthinfo.org/topics/telehealth#challenges**

PROMISING STRATEGIES
Partnerships with Law Enforcement

The growing opioid crisis has necessitated partnership between law enforcement and local treatment services in an effort to save the lives of individuals with substance use disorder rather than put them into the criminal justice system.

KEY FACTS about partnerships with law enforcement

- Maine is one of 14 states that had statistically significant increases in overdose deaths between 2013-2014.8 Maine had the third largest percent increase in overdose deaths (27.3 percent) behind North Dakota and New Hampshire.[8]

- From 2009-2015 per capita deaths due to heroin and non-pharmaceutical Fentanyl were highest in Cumberland, Washington, York, Androscoggin, and Kennebec counties.[8]

PROMISING STRATEGIES AND MODELS

EXAMPLE: Operation HOPE **(the Heroin Opiate-Prevention Effort)** is a program run through the Scarborough Police Department that works to get individuals living with substance use disorder into treatment. When an individual comes into the Scarborough Police Department requesting help with their substance use disorder they can voluntarily turn in drugs, needles, and other drug paraphernalia without the risk of getting arrested or charged with any crimes. Individuals are screened by a police officer and if they are found eligible for the Operation HOPE program, they are connected with an "Angel"—a volunteer trained by the Portland Recovery Community Center who connects Operation HOPE participants to treatment facilities. In the face of long wait times at the limited in-patient treatment facilities in Maine, Operation HOPE has formed partnerships with, and sent individuals to, in-patient treatment facilities in other states including Arizona, California, and Florida. Transportation to the treatment facility is paid for by Operation HOPE, and program Angels negotiate scholarships and other arrangements with inpatient facilities for individuals who do not have insurance coverage. By mid-May 2016—eight months after the project was launched—150 individuals had been placed into treatment through Operation HOPE. The participants came from 76 towns and cities across 14 Maine counties.

Operation HOPE is modeled after a similar effort by the Gloucester Massachusetts Police Department called the Angel Initiative. Funding for Operation HOPE is supported by a grant from the Maine State Department of Public Safety. A similar initiative was recently launched by the Ellsworth Police Department in Hancock County.

EXAMPLE: In 1996, the **Portland Police Department** began what came to be a nationally recognized **behavioral health response program** that embeds mental health professionals in the Police Department. Staff members dedicated to the program include a full-time behavioral health coordinator who oversees the Department's co-responder program and facilitates crisis intervention training for the Department's officers; a liaison from a community-based mental health provider who acts as a full time co-responder that assists officers as they interact with individuals having a mental health crisis; and interns from the University of Southern Maine Clinical Counseling Master's program who respond to behavioral health related calls with police officers, make referrals, and conduct follow ups. Other program components include follow up with residents who have repeat behavioral health-related calls, and attendance at Community Crisis Providers meetings that bring together representatives from community agencies who work together to address the cases of individual residents who have interfaced with the police department.

The Portland Police Department is now replicating their mental health response to address substance abuse issues in the Portland community. The Department's **Law Enforcement Addiction Advocacy Program (LEAAP)** is staffed by a Substance Use Disorder Liaison who responds to the site of overdoses, goes to the hospital to advocate for quality care and follow up plans for individuals who overdose, connects individuals with behavioral health resources in Portland, and does proactive outreach with organizations in Portland, including homeless shelters. Monthly meetings with case managers and providers are held to come up with solutions for individuals who have overdosed and interacted with the LEAAP liaison. Another monthly meeting is focused on individuals who are incarcerated. The program has been well received by Portland Police officers and is funded through drug forfeiture money.

Considerations for application in Maine

- Community-level conversations and planning have been the starting point for fostering closer cooperation between law enforcement and the behavioral health and substance abuse treatment communities.

- Broader dissemination of models and strategies for increased cooperation is needed.

Additional resources on partnership with law enforcement:

- The Police Assisted Addiction and Recovery Initiative: **http://paariusa.org/about-us/lot-little-start-police-department-based-opiate-outreach-program/**
- Gloucester Police Department "Angel Program": **https://www.ruralhealthinfo.org/community-health/project-examples/903**

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