

8-1-2010

## **Mental Health Services in Rural Jails [Working Paper]**

Melanie M. Race MS

*University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center*

Anush Yousefian Hansen MS,MA

*University of Southern Maine*

David Lambert PhD

*University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center*

David Hartley PhD, MHA

*University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center*

Follow this and additional works at: [https://digitalcommons.usm.maine.edu/behavioral\\_health](https://digitalcommons.usm.maine.edu/behavioral_health)

---

### **Recommended Citation**

Race, M., Yousefian, A., Lambert, D., & Hartley, D. (2010). Mental health services in rural jails. (Working Paper #42). Portland, ME: University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center.

This Report is brought to you for free and open access by the Maine Rural Health Research Center (MRHRC) at USM Digital Commons. It has been accepted for inclusion in Mental Health / Substance Use Disorders by an authorized administrator of USM Digital Commons. For more information, please contact [jessica.c.hovey@maine.edu](mailto:jessica.c.hovey@maine.edu).

Maine Rural Health Research Center  
Working Paper #42

# Mental Health Services in Rural Jails

August 2010

*Authors*

Melanie M. Race, M.S.  
Anush Yousefian, M.S.  
David Lambert, Ph.D.  
David Hartley, Ph.D.

*Cutler Institute for Health and Social Policy  
Muskie School of Public Service  
University of Southern Maine*

UNIVERSITY OF SOUTHERN MAINE  
Muskie School of Public Service



**Rural Health Research  
& Policy Centers**

Funded by the Federal Office of Rural Health Policy

[www.ruralhealthresearch.org](http://www.ruralhealthresearch.org)

# **Mental Health Services in Rural Jails**

August 2010

Maine Rural Health Research Center

Working Paper #42

Melanie M. Race, M.S.  
Anush Yousefian, M.S.  
David Lambert, Ph.D.  
David Hartley, Ph.D.

Cutler Institute for Health and Social Policy  
Muskie School of Public Service  
University of Southern Maine



**Rural Health Research  
& Policy Centers**

Funded by the Federal Office of Rural Health Policy

[www.ruralhealthresearch.org](http://www.ruralhealthresearch.org)

This study was funded under a Cooperative Agreement with the federal Office of Rural Health Policy, Health Resources and Services Administration, DHHS (CA#U1CRH03716). The conclusions and opinions expressed in the paper are the authors' and no endorsement by the University of Southern Maine or the sponsor is intended or should be inferred.

## Table of Contents

Abstract .....	i
Introduction .....	1
Methods .....	4
Results .....	5
Discussion .....	10
Conclusions .....	12
References .....	15
Table 1: Characteristics of State Corrections Systems .....	14

## **Abstract**

*Purpose:* The purpose of this study was to explore the role of rural jails in the mental health systems in rural communities, investigate how rural jails manage mental health and substance abuse problems among inmates, ascertain barriers to providing mental health services faced by rural jails, and identify promising practices for service delivery.

*Methods:* We conducted 35 semi-structured telephone interviews with state-, county- and facility-level corrections representatives, jail and mental health administrators, jail employees, and mental health clinicians. We then compiled the interview data and identified themes among the answers to our research questions.

*Findings:* Jailing an individual in need of psychiatric care is problematic because comprehensive mental health services may not be available in jail, as was the case in some of the rural jails we studied. Nevertheless, interventions to protect individuals who may harm themselves or others are sometimes required. Rural jail administrators and mental health providers in our study understood the need for mental health services for jail inmates but were constrained by inadequate community mental health resources, lack of coordination with community mental health providers, and infrastructure challenges including facilities, transportation, and legal processes. Our recommendations encompass steps rural communities can take to better serve this population.

## Introduction

The decentralized U.S. corrections system includes federal, state, and municipal facilities and services. County and city jails house inmates awaiting trial, serving short sentences for non-felony crimes, and awaiting transfer to other facilities—resulting in diverse populations with rapid turnover. While large urban jails may be staffed to address mental health issues, services in rural jails may be limited to what can be provided by the sheriff’s staff. Most stakeholders we interviewed agreed that more collaboration is needed between jails and mental health systems to provide mental health services to inmates.

The prevalence of mental illness among prison and jail inmates has attracted attention in both the mental health and criminal justice fields. Estimates of the prevalence of mental illness in jails range from 8% to 16%,<sup>1-7</sup> with one estimate of 64% that used markedly different measurement criteria.<sup>8</sup> Ruddell (2006) placed the rate of *serious* mental illness among inmates in jails with more than 28 beds at 13%, approximately twice the rate in the U.S. population.<sup>9</sup>

A number of studies suggest that the deinstitutionalization of mental health services has shifted responsibility for and costs associated with caring for people with serious mental illness to the criminal justice system.<sup>6,10-11</sup> Restrictive commitment laws,<sup>11-12</sup> fragmented treatment systems,<sup>11,13</sup> and the war on drugs<sup>11</sup> may have exacerbated the problem. The lengthy process and strict criteria for involuntary commitment, psychiatric bed shortages, and concerns about premature emergency department discharge may make law enforcement officers more likely to arrest an individual with mental illness than seek treatment for him or her.

Community mental health systems tend to be fragmented systems supported by a mix of state and federal programs, and may include inpatient and outpatient treatment, supportive housing, support and self-help groups, and assertive community treatment. In rural areas,

shortages of mental health professionals, inadequate insurance coverage, and stigma are barriers to comprehensive mental health services.<sup>14</sup> The New Freedom Commission on Mental Health identified jails and prisons as a primary source of mental health care for some individual with serious mental illness, and emphasized the need for appropriate diversion and re-entry programs.<sup>14</sup>

In contrast to the broader array of community mental health services, services in jails should include screening, crisis intervention, short-term treatment, and prerelease planning; some inmates require special housing. However, while most jails provide screening, significantly fewer provide crisis intervention and prerelease planning.<sup>15-16</sup> Short incarceration lengths limit opportunities for treatment; as a result, few jail inmates receive mental health services.<sup>7-8,15</sup> Furthermore, jails are often underfunded and underprepared to care for inmates with special needs, and mental health resources are largely contingent on jail size.<sup>7</sup> For example, a recent Bureau of Justice Statistics report that placed the average annual suicide rate in jails between 2000 and 2007 at 42 per 100,000 found that in small jails (fewer than 50 inmates) the rate was 169 per 100,000. The majority (59%) of small jails provided no counseling or psychiatric services.<sup>17</sup>

Small jails—including most rural jails—may lack resources to establish jail-based services and rely on community mental health agencies to provide services to inmates with mental illness. For example, Phillips and Mercke found that community mental health centers provided counseling, psychiatric services, and limited crisis intervention and prerelease services in many Kentucky jails; most jail administrators thought that community mental health centers should be responsible for mental health services and prerelease planning for inmates.<sup>2</sup> Jails may contract with psychiatry programs at local medical schools to provide psychiatric (or

telepsychiatric) services<sup>2</sup>; this may be an appealing option for jails in the more than 1,500 rural counties that lack a practicing psychiatrist, psychologist, or psychiatric social worker.<sup>16</sup>

Prerelease planning helps inmates reintegrate into the community after release; effective prerelease planning necessitates cooperation between jails and community mental health systems. Combined with other supportive community services, uninterrupted mental health care can reduce the likelihood of reincarceration.<sup>3,6,16</sup> Such care usually requires insurance coverage, which improves access to mental health treatment, including medication, upon release. For this reason, suspension, rather than termination, of coverage for Medicaid enrollees serving short jail sentences hastens reinstatement—and connection to services—by eliminating the lengthy reapplication process.<sup>3,6,16</sup> Insurance also facilitates case management, which improves services for offenders with mental illness and strengthens the linkages between the mental health and criminal justice systems. Case management is emerging as a promising practice in the treatment of offenders with mental illness.<sup>7,10-11,18</sup>

To better understand how rural jails meet the needs of inmates with mental illness and the interaction between rural jails and the mental health system, we conducted case studies to assess the role of rural jails in the mental health systems in rural communities. Our previous research indicated that rural jails often serve as default holding facilities with limited mental health services.<sup>19</sup> We interviewed state officials, jail administrators, and mental health providers in four states to investigate how rural jails manage mental health and substance abuse problems among inmates, assess barriers to providing mental health services faced by rural jails, and identify promising practices for service delivery.



## Methods

We selected Minnesota, Montana, Texas, and Vermont as case study sites based on geographic diversity, corrections spending, incarceration trends, and corrections initiatives. Minnesota, Montana, and Texas offered examples of small, rural, county-based jails while Vermont exemplified a consolidated correctional system that houses jail and prison inmates in the same state-run facilities. In the states with county-based jail systems, we studied three or four counties in each state; in Vermont, we studied four consolidated facilities. Characteristics of the corrections systems in the four states are shown in Table 1.

We conducted semi-structured telephone interviews with county- and facility-level jail and mental health administrators, staff, and clinicians. We interviewed state-level corrections representatives in all four states and state-level mental health officials in two states (Montana and Vermont). A preliminary telephone conference with jail and mental health officials and stakeholders in rural Maine, followed by expert review of interview questions, yielded interview protocols that guided our semi-structured telephone interviews.

During the interviews, we collected information about the mental health and substance abuse problems that rural jails encounter; rural-specific barriers to providing mental health services; relationships between jails and mental health providers; and promising practices for providing services to inmates. We conducted a total of 35 interviews, each of which lasted approximately 40 minutes. Upon completion of the interviews, we compiled the interview data and identified themes among the answers to our research questions.

## Results

### *Rural jails become default facilities for community members with mental illness*

According to respondents, the percentage of inmates with mental illness ranges from 20% to 55%. Many believed that with better mental health and substance abuse services in rural areas, fewer of these individuals would end up in jails. The lack of adequate services in rural communities is associated with limited resources, workforce shortages, and transportation challenges. Jails often house inmates unwanted elsewhere, since corrections cannot reject a person with mental illness who has committed a crime or been deemed a community nuisance. Respondents in all four states indicated that admitting patients/inmates to the limited available psychiatric beds is “nearly impossible.” State facilities have complicated and time-consuming criteria for admission, requiring multiple hearings, often located at some distance from jails. This limitation, combined with a lack of rural community mental health services, results in the detention of individuals with mental illness in rural jails. Many administrators commented that individuals with mental illness enter their facilities simply because there is nowhere else for them to go. One Minnesota respondent told us that “people who are very mentally ill in public end up in jail because there’s nowhere else to put them.” One Vermont jail administrator explained:

*We are absolutely the first line of defense. If there’s any way for the community to charge the person with a misdemeanor and put [the person] into a facility, they will do that because it’s easier than getting them into a state hospital or mental health programming.*

According to another Minnesota respondent, individuals are not jailed because they have mental illness, but for engaging in criminal behavior. However, criminal charges may be “creative” in that they are designed to ensure that the individual is detained.

*Few mental health services are available for jail inmates*

In Minnesota, Montana, and Texas, some rural jails have formal contracts or informal arrangements with local mental health agencies to provide core services to inmates in-house, while others transport inmates to county-run or nonprofit mental health centers. One administrator reported that the county's department of human services is reluctant to treat jail inmates, and another reported that due to recent changes in county funding for mental health services, it was unclear how mental health services would be provided for inmates. Vermont's central mental health agency has a staff psychiatrist, nurse practitioners, social workers, and licensed mental health counselors available to all facilities; Vermont also has a correctional mental health unit.

Respondents in all four states indicated that jail inmates receive few mental health services. Screening, medication management, and crisis services are commonly available in rural jails, but counseling is not. One mental health agency respondent emphasized that the agency did "not do talk therapy in the jail." Sheriffs reported that inmates' frequent requests for mental health services could not always be accommodated. The limited ability of jails to purchase services was cited by mental health agencies as a reason for the paucity of services. Even in Vermont's system, with on-site clinicians to provide services to longer-term prison inmates, jail inmates generally receive only screening and crisis intervention. Despite this, one Vermont administrator explained that inmates receive better care in the state correctional facility than they would out in the community, where few services exist. Even so, many inmates will reoffend, often due to lapses in medication. Some Minnesota jail administrators described "frequent flyers" who come into jail, are stabilized on medication, are released, experience a medication lapse, and then restart the cycle of incarceration. For many of these individuals, jails are the only

available places where their medications are properly managed. While it is essential to continue or resume treatment for inmates taking prescribed psychotropic medications to help prevent further disruptive behavior, both jail and mental health staff reported that inmates often report mental health symptoms in order to get a prescription for a mood-altering substance. Finally, as noted earlier, most rural areas lack psychiatrists to meet the needs of the jail population; this is the case in rural Montana, for example, where 80% of counties have no psychiatrists.<sup>20</sup>

Respondents reported limited substance abuse services in rural jails, primarily due to a lack of funding for substance abuse-specific services. Vermont respondents noted the availability of group meetings, specific detoxification protocols and treatment for symptoms of withdrawal, and a network of substance abuse treatment providers contracted to provide services outside of the facilities. In Montana, although substance abuse services are not provided in jails, the corrections system is linked to a system of substance abuse treatment facilities; jail inmates may be transferred to one of those facilities.

#### *Jails are not equipped to handle inmates with mental illness*

Administrators expressed concern about inmates with mental illness who pass through their facilities. Other inmates may take advantage of these inmates by trying to “wind them up” for entertainment. One superintendent explained:

*I don't know if communities know how detrimental it is for the mentally ill to be in this environment, because it is chaotic and disorganized and they get taken advantage of...it does more harm than good and exacerbates the problem.*

A mental health agency director in Minnesota characterized jail as an “adverse environment for persons with serious mental illness,” pointing to noise, crowdedness, lack of privacy, and violence as particularly problematic.

Some facilities struggle with separating inmates with mental illness who do not fare well in the general population. As one jail administrator commented, “We don’t have enough rooms to separate [inmates with mental illness] from the general [jail] population.” Inmates, especially those deemed a danger to themselves or in danger from other inmates, may be placed in protective custody or “special housing,” although respondents indicated that they do not like to keep an inmate segregated for extended periods of time. Lack of appropriate space, even in larger facilities, is an enormous barrier. Only one of the jails we studied, a new facility designed with the needs of the current jail population in mind, had a segregated area with constant surveillance that preserved inmates’ access to recreation, canteen, and other privileges. Vermont respondents indicated that the substantial amount of movement of inmates between facilities can make it hard to establish connections and ensure communication among providers and staff members serving inmates’ mental health needs. Case managers are generally responsible for tracking this movement and ensuring smooth transitions.

#### *Jail employees lack mental health training*

Respondents asserted that jail employees need more training on how to handle individuals with mental illness. One Minnesota jail administrator noted that his staff has no formal training, and that no training is available. Other administrators indicated that employees have some training in dealing with disorders and identifying problems, though one commented that the training emphasizes policy and procedure. Jail personnel struggle to determine whether someone is truly experiencing a mental health problem or pretending, suggesting a need for training on how to recognize individuals with mental illness. Basic training for jail personnel in Montana includes the signs of suicide risk, use of force guidelines, rights and responsibilities of inmates, cultural diversity, communication skills, and some counseling techniques. In Vermont,

all booking officers are trained to use an initial screening to determine if the individual is a risk and receive annual training in behavioral assessment and communication skills. Staff members also receive training from the contracted mental health agency on topics such as suicide prevention and working with female inmates who have experienced trauma.

In Montana, a training module developed by the Law Enforcement Academy encourages trainees to consider why a crime was committed, whether a person with mental illness was involved, and how the officer can de-escalate the situation and take the individual to a health facility instead of a jail. Appropriate facilities are often unavailable. A respondent noted that officers always ask the same question: “OK, I have followed the protocol; this person has a mental illness and is acting out, *where do I take him?*” Furthermore, trainings occur in metropolitan areas distant from rural jails, and state training subsidies fall short of covering all costs for attendees, placing a financial strain on sheriff’s departments or employees.

*Transportation can be a challenge during and after incarceration*

Most respondents agreed that moving inmates from one facility to another did not create major problems or put strains on officers’ time, with Montana being a notable exception. The most frequently mentioned problem in Montana was the great distance from many rural jails to the state hospital; the 12-hour round trip can tie up two staff members for a full day. Jail administrators in Minnesota were confident in their facilities’ procedures for transporting inmates with mental illness to and from courts, hospitals, and treatment facilities. Likewise, moving inmates caused few problems in Vermont.

Transportation is a major barrier to connecting individuals to the community-based services that are necessary to prevent recidivism. With little or no public transportation available in rural communities and driving restrictions for some released inmates, released inmates with

mental illness may have difficulty finding transportation to appointments, especially if family relationships are strained, sometimes the result of mental illness, substance abuse, or incarceration.

## **Discussion**

While respondents' estimates of 20% to 55% for the percentage of jail inmates with mental illness significantly exceed those reported in the literature, they are an indication of the perceived magnitude of the problem. In rural areas, jail cells are often more readily available than mental health beds, which may encourage incarceration of individuals exhibiting symptoms of mental illness. Jailing an individual in need of psychiatric care is problematic because comprehensive mental health services may not be available in jail, as was the case in some of the rural jails we studied. On the other hand, there is still an occasional need to intervene to protect an individual who may harm him/herself or someone else; law enforcement and jail employees often face such situations. We found evidence of efforts to avoid incarcerating individuals exhibiting symptoms of mental illness, even when the alternatives are unorthodox, such as "driving around therapy." We identified a number of promising practices for improving mental health services for rural jail inmates.

### *Short-term hold policies can provide an alternative to jail*

One of most frequently mentioned problems in rural jails is the individual who has not committed a crime but needs some form of intervention to prevent harm, or simply because his or her behavior has caused citizen complaints. Restrictive admission and treatment criteria in hospital emergency rooms and local mental health centers often leave law enforcement personnel with the dilemma of where to take an individual exhibiting symptoms of mental illness. One

respondent in Montana noted that the jail would occasionally hold an individual not charged with a crime until an appropriate setting or a family member could be found.

The problem of having no appropriate placement for a disruptive individual who has not actually committed a crime has been addressed in Billings, Montana. An independent facility located near a hospital that offers inpatient psychiatric care can admit and hold an individual in crisis for up to 23 hours. Montana has appropriated funds for crisis intervention grants to counties and to open additional short-term crisis facilities; however, rural sheriffs we interviewed felt that such facilities would never be accessible to remote rural counties. In Vermont, all nine state facilities can hold intoxicated individuals, some of whom have co-occurring mental illness, for 24 hours without charging them with any crime—until they are sober and can be released. These 23- or 24-hour hold policies can provide an alternative to jail for disruptive or troubled individuals who need a place to go but have not committed a crime.

#### *Regular communication among stakeholders can improve mental health services*

To cope with lack of funding, lack of services, lack of mental health practitioners, and difficult inmates, rural sheriffs' departments and jail administrators have developed relationships with their local health and mental health service providers. Their stories during our interviews revealed resourceful problem solving to manage difficult situations and minimize negative outcomes for both communities and inmates.

Some facilities reported holding regular stakeholder meetings with sheriffs, jail employees, mental health staff members, medical personnel, social service directors, and others. These meetings provide an important venue for identifying needs, sharing concerns, and developing policies and practices to better meet the mental health needs of inmates. Texas has devised a novel way to connect jails to the mental health system. The thirty-nine regional Mental



Health and Mental Retardation (MHMR) Centers that deliver mental health services within the state receive daily lists of arrestees and compare them to their client lists. This practice allows the mental health centers to coordinate with a case manager if an arrested individual is an active client or to provide medical records for past clients.

*Training can improve mental health services in jails and prevent inappropriate incarceration*

Training on topics such as behavioral assessments, crisis management, suicide prevention, and trauma provide jail employees with important information to supplement their prior training and experience. Jail employees manage extremely stressful situations on a daily basis, and more information and tools to address some of the cases they encounter can improve the functioning and safety of their inmate population. Mental health training can facilitate the recognition and treatment of mental illness in jail inmates.

One promising practice implicit in some of our interviews was the identification and diversion of individuals with mental illness before incarceration. Trained law enforcement and jail employees, access to mental health professionals, standardized responses to appropriate screening tools, and adequate community mental health resources can help ensure that individuals with mental illness are identified and treated before incarceration. The Montana program that trains personnel, particularly “first responders,” to recognize and respond to situations that involve someone with a mental illness is a promising practice from which rural jail employees could benefit. More research may be needed to determine the most effective approach to diversion in rural areas, with limited resources and small service populations.

## **Conclusions**

Rural communities cannot afford to offer the level of services found in more populous areas, and increased funding for jails or for services to inmates is not a high priority for most

policymakers. We recommend realistic policies with reasonable price tags that should improve mental health services for individuals with mental illness and ease the burdens on social services, health services, corrections, and law enforcement personnel.

- Rural communities should develop community-based mental health and substance abuse services to help place individuals with mental illness in appropriate settings and to improve follow-up care for released inmates.
- Relationships should be fostered between rural jail administrators and community mental health providers to help develop creative solutions to local problems.
- Regular, formal meetings of sheriffs, jail staff members, mental health staff members, medical staff members, social service directors, juvenile services providers, and others should be encouraged in order to better coordinate care for individuals with mental illness both within jails and in the community.
- Technology such as videoconferencing should be explored as a way to simplify pre-commitment hearings and assessments.
- Where feasible, short-term holding facilities should be developed as an alternative placement for individuals who need brief interventions to protect themselves and society.

**Table 1: Characteristics of State Corrections Systems**

	Minnesota	Montana	Texas	Vermont
<b>Geographical location</b>	Midwest	West	South	Northeast
<b>State corrections spending</b> <sup>21</sup>	1.8% of general fund	8.3% of general fund	8.6% of general fund	9.3% of general fund
<b>Total incarceration rate (jails and prisons)</b> <sup>22</sup>	300 per 100,000 (1 <sup>st</sup> —lowest—quintile)	526 per 100,000 (2 <sup>nd</sup> quintile)	976 per 100,000 (5 <sup>th</sup> —highest—quintile)	317 per 100,000 (1 <sup>st</sup> quintile)
<b>Corrections initiatives</b>	Multi-county corrections initiatives including shared jails. Incarceration rate decreased between 2006 and 2008. <sup>23</sup>	Pre-trial assessment and treatment for crimes associated with mental illness or substance abuse. Use of private, non-profit contractors to operate correctional facilities.	Coordination with regional mental health centers to identify inmates with mental illness.	Consolidated prison-jail system.

## References

1. Welsh A, Ogloff JRP. Mentally ill offenders in jails and prisons: Advances in service planning and delivery. *Curr Opin Psychiatry*. 1998; 11:683-687 .
2. Phillips III DW, Mercke CG. Mental health services in Kentucky jails: A self-report by jail administrators. *J Correct Health Care*. 2003; 10:59-74.
3. Council of State Governments. *How and Why Medicaid Matters for People With Serious Mental Illness Released From Jail: Research Implications*. New York: Council of State Governments; 2007.
4. Ditton, PM. *Mental Health and Treatment of Inmates and Probationers*. (NCJ 174463). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics; 1999.
5. Maruschak, LM. *Medical Problems of Jail Inmates*. (NCJ 210696). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics; November 2006.
6. Freudenberg N. Community health services for returning jail and prison inmates. *J Correct Health Care*. 2004; 10:369-397.
7. Ruddell R. Jail interventions for inmates with mental illnesses. *J Correct Health Care*. 2006; 12:118-131.
8. James, DJ, Glaze, LE. *Mental Health Problems of Prison and Jail Inmates*. (NCJ 213600). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics; September 2006.

9. National Institute of Mental Health. *The Numbers Count: Mental Disorders in America*. [Web Page]. 2010. Available at: <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml>. Accessed July 8, 2010.
10. Lamb HR, Weinberger LE. The shift of psychiatric inpatient Care from hospitals to jails and prisons. *J Am Acad Psychiatry Law*. 2005; 33:529-34.
11. Lurigio AJ, Fallon J. Individuals with serious mental illness in the criminal justice system: The case of Richard P. *Clin Case Stud*. 2007; 6:362-378.
12. Lamb HR, Weinberger LE. Persons with severe mental illness in jails and prisons: A review. *Psychiatr Serv*. 1998; 49:483-492.
13. Laberge D, Morin D. The overuse of criminal justice dispositions: Failure of diversionary policies in the management of mental health problems. *Int J Law Psychiatry*. 1995; 18:389-414.
14. New Freedom Commission on Mental Health. *Achieving the Promise: Transforming Mental Health Care in America. Final Report*. (DHHS Pub. No. SMA-03-3832). Rockville, MD; July 2003.
15. Morris SM, Steadman HJ, Veysey BM. Mental health services in United States jails: A survey of innovative practices. *Crim Justice Behav*. 1997; 24:3-19.
16. Council of State Governments. *Criminal Justice / Mental Health Consensus Project*. New York: Council of State Governments; June 2002.

17. Noonan, M. *Mortality in Local Jails, 2000-2007*. (NCJ 222988). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics; July 2010.
18. Lamb HR, Weinberger LE, Gross BH. Community treatment of severely mentally ill offenders under the jurisdiction of the criminal justice system: A review. *Psychiatr Serv*. 1999; 50:907-913.
19. Hartley D, Ziller E, Loux S, et al. Use of critical access hospital emergency rooms by patients with mental health symptoms. *J Rural Health*. 2007; 23:108-115.
20. Freeman Cook A, Hoas H. Hide and seek: The elusive rural psychiatrist. *Acad Psychiatry*. 2007; 31:419-422.
21. National Association of State Budget Officers. *State Expenditure Report Fiscal Year 2008*. Fall 2009.
22. Harrison, PM, Beck, AJ. *Prison and Jail Inmates at Midyear 2005*. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics; May 2006.
23. The Pew Center on the States. *One in 100: Behind Bars in America 2008*. Washington, DC: The Pew Charitable Trusts; February 2008.

## Maine Rural Health Research Center Recent Working Papers

- WP44. Hartley, D., Gale, J., Leighton, A., & Bratesman, S. (2010). *Safety net activities of independent Rural Health Clinics*
- WP43. Gale, J., Shaw, B., Hartley, D., & Loux, S. (2010). *The provision of mental health services by Rural Health Clinics*
- WP42. Race, M., Yousefian, A., Lambert, D., & Hartley, D. (2010). *Mental health services in rural jails.*
- WP41. Lenardson, J., Race, M., & Gale, J.A. (2009, December). *Availability, characteristics, and role of detoxification services in rural areas.*
- WP40. Ziller, E., Anderson, N.J., Coburn, A.F., & Swartz, J. (2008, November). *Access to rural mental health services: Service use and out-of-pocket costs.*
- WP39. Lambert, D., Ziller, E., Lenardson, J. (2008). *Use of mental health services by rural children.*
- WP38. Morris, L., Loux, S.L., Ziller, E., Hartley, D. *Rural-urban differences in work patterns among adults with depressive symptoms.*
- WP37. Yousefian, A. Ziller, E., Swartz, J, & Hartley, D. (2008, January). *Active living for rural youth.*
- WP36. Loux, S. L., Hartley, D., Gale, J., & Yousefian, A. E. (2007, August). *Inpatient Psychiatric Unites in small rural hospitals: A national survey.*
- WP35. Lenardson, J. D., & Gale, J. A. (2007, August). *Distribution of substance abuse treatment facilities across the rural-urban continuum.*
- WP34. Ziller, E.C, Coburn, A.F., Anderson, N., Loux, S. (2006). *Uninsured rural families.*
- WP33. Ziller E, Coburn, Yousefian AE. (2005). *Out-of-pocket health care spending and the rural underinsured.*
- WP32. Hartley D, Ziller E, Loux S, Gale J, Lambert D, Yousefian AE. (2005). *Mental health encounters in CAH ERs: A national survey.*
- WP31. Hartley D, Hart, V, Hanrahan N, Loux, S. (2004). *Are advanced practice psychiatric nurses a solution to rural mental health workforce shortages?*

Established in 1992, the Maine Rural Health Research Center draws on the multidisciplinary faculty, research resources and capacity of the Cutler Institute for Health and Social Policy within the Edmund S. Muskie School of Public Service, University of Southern Maine. Rural health is one of the primary areas of research and policy analysis within the Institute, and builds on the Institute's strong record of research, policy analysis, and policy development.

The mission of the Maine Rural Health Research Center is to inform health care policymaking and the delivery of rural health services through high quality, policy relevant research, policy analysis and technical assistance on rural health issues of regional and national significance. The Center is committed to enhancing policymaking and improving the delivery and financing of rural health services by effectively linking its research to the policy development process through appropriate dissemination strategies. The Center's portfolio of rural health services research addresses critical, policy relevant issues in health care access and financing, rural hospitals, primary care and behavioral health. The Center's core funding from the federal Office of Rural Health Policy is targeted to behavioral health.

Maine Rural Health Research Center  
Muskie School of Public Service  
University of Southern Maine  
PO Box 9300  
Portland, ME 04104-9300  
207-780-4430  
207-228-8138 (fax)  
<http://muskie.usm.maine.edu/ihp/ruralhealth/>