TRACKING CHANGES IN THE NORTH COUNTRY

CARSEY INSTITUTE

NEW ENGLAND
ISSUE BRIEF NO. 20

SPRING 2010

Help in a Haystack: Youth Substance Abuse and Mental Health Services in the North Country

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Extensive research has identified the need for effective substance abuse and mental health services for youth living in inner cities. However, less attention has been paid to the substance abuse and mental health problems faced by rural youth. Rural youth are more likely to have substance abuse problems than their non-rural counterparts.[1] Access to substance abuse services in rural areas is very limited. As a result, although the prevalence of mental illness is similar for both rural and urban youth, rural youth are less likely to receive the appropriate mental health services when needed.[2] Of particular concern is the lack of adequate services for rural youth with co-occurring mental health and substance abuse problems.[3]

This brief focuses on the substance abuse and mental health services available for youth aged 14 to 18 in Carroll, Coos, and Grafton counties of rural northern New Hampshire.[4] Over the past few decades, these three counties have experienced population loss and economic restructuring, mostly due to the closing of the majority of the pulp and paper mills in these areas.[5] This pace of change has only accelerated in the current economic recession. A recent study finds that all three counties face a critical shortage of appropriate youth services.[6]

The findings shown here are based on local data on risky youth behavior, a Web-based survey of more than 100 youth service providers and an additional eleven in-depth interviews of these same youth service providers who volunteered to participate. This brief documents the prevalence of substance use and mental illness among youth in northern New Hampshire, explores the strengths and weaknesses of current health services for youth from the perspective of the service providers, and compares the substance abuse and mental health services available in Carroll, Coos, and Grafton counties to nationally recognized best practices.

Key Findings

- Youth in the North Country have relatively high rates of substance abuse and mental illness, yet the availability of treatment services is limited.
- North Country youth service providers face barriers to referring youth to the appropriate services.
- Providers would like to see an increase in the number of mental health and substance abuse professionals, more funding, and a greater variety of services.
- Providers would also like the current "unsystematic system" restructured, including efforts to put youth in leadership positions.

Prevalence of Substance Use

Using data from the 2007 Youth Risk Behavior Survey (YRBS) and the 2007 Teen Assessment Project (TAP), Table 1 presents students' self-reported use of various substances.[7] Compared with New Hampshire as a whole, overall substance use in the North Country appears to be higher, especially for binge drinking, methamphetamine use, and inhalants. Binge drinking (consuming five or more drinks of alcohol in a row within a couple of hours) is the most prevalent substance use behavior for all North Country youth. According to a 2006 study by Karen Van Gundy, the use of inhalants and meth is an increasing problem for rural populations, and data from the 2007 YRBS and TAP supports this finding in the North Country.[8] Furthermore, although often seen as problems of the inner city, cocaine and heroin are also issues for youth in the North Country.

Overall, Kingswood Regional and Kennett High School students in Carroll County, and Mascoma Valley Regional High School students in Grafton County have higher reported rates of all six substances than students in New Hampshire as a whole. On the other hand, Stratford and

Table 1: Percentage of student substance use*

	BINGE DRINKING	MARIJUANA	INHALANTS	COCAINE	METH	HEROIN
Carroll County[a]	**25.6**	**24.6**	**12.4**	**8.5**	**7.0**	**2.8**
Kingswood Regional High School[b]	29.1	31.2	14.4	12.0	8.7	3.0
Moultonborough Academy	16.5	12.4	6.2	4.0	2.8	1.1
Coos County	**29.1**	**18.3**	**14.1**	**8.9**	**5.7**	**2.8**
Berlin High School	41.1	33.9	16.2	16.0	5.5	3.8
Colebrook Academy	25.7	15.3	19.3	12.7	8.0	3.3
Gorham High School	25.4	17.7	10.6	7.7	4.9	1.4
Groveton High School	30.8	18.5	20.8	6.2	6.9	3.1
Pittsburg High School	24.3	24.3	13.5	13.5	8.1	5.4
Stratford High School	24.4	4.5	6.7	0.0	2.2	0.0
White Mountains Regional High School	32.0	14.0	11.7	5.9	4.1	2.3
Grafton County	**25.2**	**20.8**	**11.4**	**6.7**	**6.2**	**3.8**
Hanover High School[c]						
Lebanon High School	30.7	22.9	15.3	9.4	5.0	3.3
Linwood High School[d]	24.0	29.1	7.0	5.0	11.0	3.0
Lisbon High School[c]						
Littleton High School	27.9	15.8	11.4	1.0	3.0	1.0
Mascoma Valley Regional High School	31.3	25.2	19.7	15.8	10.6	7.0
Newfound Regional High School[d]	23.0	18.5	9.0	4.0	9.0	3.0
Plymouth Regional High School[d]	14.0	13.5	6.0	5.0	8.0	3.0
Profile High School[c]						
Woodsville High School[c]						
New Hampshire	**28.4**	**22.9**	**12.8**	**8.8**	**5.6**	**3.0**
Nationally	**26.0**	**19.7**	**13.3**	**7.2**	**4.4**	**2.3**

*** All data are from the 2007 YRBS, unless otherwise noted. The percentage of alcohol and marijuana use is for students who reported using the substance one or more times in the past thirty days; percentage use of all other drugs is based on students who reported using them one or more times in their lifetime.**

[a] This is the county average.

[b] Data for Kingswood Regional High School are from the 2005 YRBS.

[c] YRBS or TAP data for Hanover, Lisbon, Profile, and Woodsville High Schools are unavailable for 2005 and 2007.

[d] Data for Linwood, Newfound Regional, and Plymouth Regional High Schools are from the 2007 TAP.

Gorham students in Coos County, Moultonborough Academy students in Carroll County, and Littleton students in Grafton County have the lowest reported rates for all six substances. Hence, not only do drug variations exist between counties but also within counties. It is crucial to understand why, among geographically and otherwise similar areas, there is such variation in rates of reported substance use.

The high rate of substance abuse in rural areas like the North Country can be attributed to a combination of factors. Compared with urban populations, rural populations have lower education levels and higher poverty and unemployment rates. This combination often encourages drug manufacturing or dealing as a means of economic survival.[9] Rural youth are also more likely to begin using drugs at an earlier age.[10] Additionally, boredom or idleness is more prevalent among rural youth, owing to a lack of social and recreational opportunities, and youth who are bored are more likely to use drugs and alcohol.[11] Cultural norms or beliefs in rural areas are often more accepting of substance use, especially underage drinking. Finally, alcohol, marijuana, and meth, in particular, are more accessible in rural areas.[12]

Table 2 presents student attitudes and self-reported behaviors that may help explain the higher rate of use among rural youth in New Hampshire (compared with their non-rural counterparts). Most notably, compared with New Hampshire as a whole, North Country students are more likely to begin drinking before age 13 and less likely to report that they or their parents believe it is "wrong" or "very wrong" for someone their age to drink alcohol. Interestingly, Kennett and Kingswood Regional High School students in Carroll County, Berlin High School students in Coos County, and Mascoma Valley Regional High School students in Grafton County all reported greater accessibility to drugs than did students in New Hampshire as a whole. On the other hand,

Table 2: Percentage of student substance use behaviors and attitudes*

	ALCOHOL BEFORE AGE 13	ALCOHOL WRONG	PARENTS: ALCOHOL WRONG	ACCESS TO ALCOHOL	ACCESS TO MARIJUANA	ACCESS TO OTHER DRUGS
Carroll County[a]	**21.4**	**37.5**	**83.8**	**74.2**	**69.3**	**28.5**
Kennett High School	26.4	41.9	82.6	74.4	72.0	28.0
Kingswood Regional High School[b]	23.0	47.0	82.6	83.0	80.6	36.2
Moultonborough Academy	14.9	53.4	86.3	65.1	55.2	21.4
Coos County	**25.5**	**48.3**	**79.8**	**78.6**	**60.6**	**27.6**
Berlin High School	28.9	40.9	75.4	78.6	74.6	32.8
Colebrook Academy	31.1	45.6	82.4	77.9	60.4	32.9
Gorham High School	6.8	48.3	79.0	77.6	64.8	22.5
Groveton High School	37.2	48.8	79.8	76.7	58.9	25.8
Pittsburg High School	29.7	46.2	74.4	87.2	64.1	41.0
Stratford High School	22.7	57.8	84.4	80.0	44.4	15.6
White Mountains Regional High School	22.2	50.3	83.0	72.1	56.7	22.8
Grafton County	**25.9**	**57.3**	**81.2**	**69.7**	**54.5**	**22.1**
Hanover High School[c]						
Lebanon High School	20.3	44.4	79.2	71.7	60.0	24.5
Linwood High School[d]	33.0	70.0	82.0	64.0	62.0	17.5
Lisbon High School[c]						
Littleton High School	18.9	55.7	84.7	74.0	47.0	20.0
Mascoma Valley Regional High School	29.4	42.8	79.1	79.3	67.9	30.7
Newfound Regional High School[d]	36.0	66.0	80.0	74.0	48.0	24.5
Plymouth Regional High School[d]	18.0	65.0	82.0	55.0	42.0	15.5
Profile High School[c]						
Woodsville High School[c]						
New Hampshire	**18.1**	**54.6**	**82.9**	**74.0**	**65.4**	**27.3**

*** All data are from the 2007 YRBS, unless otherwise noted. "Alcohol before age 13" refers to the percentage of students who reported having "their first drink of alcohol other than a few sips before age 13." "Alcohol wrong" refers to the percentage of students who reported they believe it is "wrong" or "very wrong" for someone their age to drink alcohol; "Parents: alcohol wrong" refers to the percentage of students who reported their parents thought it was "wrong" or "very wrong" for someone their age to drink alcohol. "Access to Alcohol, Marijuana, and Other Drugs" refers to the percentage of students who think it is "easy" or "very easy" to get some alcohol, marijuana, or "a drug like LSD, cocaine, or amphetamines," respectively.**

[a] This is the county average.

[b] Data for Kingswood Regional High School are from the 2005 YRBS.

[c] YRBS or TAP data for Hanover, Lisbon, Profile, and Woodsville High Schools are unavailable for 2005 and 2007.

[d] Data for Linwood, Newfound Regional, and Plymouth Regional High Schools are from the 2007 TAP.

students in Lebanon, Linwood, and Plymouth High Schools in Grafton County were more likely to report that drugs are not "easy" to obtain compared with students in the state as a whole. Not surprisingly, those schools where reported drug availability is the highest are also those with the highest rates of reported substance use.

The three counties vary greatly in substance use patterns, yet it is important to compare them to discern which counties and school districts may be more effective in reducing substance risk attitudes and behaviors and why. This will allow policy makers and program designers to better target substance abuse services.

Inadequate or ineffective prevention and treatment are also key components in understanding high rates of substance abuse among rural youth. Overall, funding for substance abuse services is very limited. Patients must travel long distances and be put on lengthy waiting lists for a very limited number of services.[13] In most cases, treatment facilities handle general care and lack accredited mental health and substance abuse specialists.[14] This lack of specialty substance abuse treatment services in rural areas often leads to these cases being treated via the juvenile justice system.[15] Even those with access to treatment often avoid it, owing to a pervasive notion that one should be "taking care of your own" and a fear of stigma.[16]

Table 3: Percentage of students reporting mental health problems*

	DEPRESSION	SERIOUSLY CONSIDERED SUICIDE	ATTEMPTED SUICIDE
Carroll County[a]	**26.5**	**15.8**	**6.9**
Kennett High School	29.4	19.7	9.3
Kingswood Regional High School[b]	32.4	20.8	8.5
Moultonborough Academy	17.6	6.8	2.8
Coos County	**23.2**	**15.0**	**7.3**
Berlin High School	24.8	16.5	7.4
Colebrook Academy	26.0	17.3	11.3
Gorham High School	23.8	12.6	4.9
Groveton High School	26.7	17.7	11.6
Pittsburg High School	23.1	20.5	10.5
Stratford High School	13.3	8.9	0.0
White Mountains Regional High School	26.1	11.5	5.1
Grafton County	**42.7**	**14.1**	**8.1**
Hanover High School[c]			
Lebanon High School	27.6	17.7	8.3
Linwood High School[d]		10.0	6.0
Lisbon High School[c]			
Littleton High School	32.7	11.9	5.0
Mascoma Valley Regional High School	26.4	15.9	9.1
Newfound Regional High School[d]		15.0	12.0
Plymouth Regional High School[d]		6.0	8.0
Profile High School[c]			
Woodsville High School[c]			
New Hampshire	**24.6**	**13.7**	**5.5**
Nationally	**28.5**	**14.5**	**6.9**

*** All data are from the 2007 YRBS, unless otherwise noted. "Depression" refers to the percentage of students who reported feeling "so sad or hopeless almost every day for two weeks or more in a row during the past 12 months that they stopped doing some usual activities." However, the TAP did not ask this question. "Seriously considered suicide" refers to the percentage of students who reported seriously considering suicide in the past twelve months. "Attempted suicide" refers to the percentage of students who reported one or more suicide attempts that "resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months."**

[a] This is the county average.

[b] Data for Kingswood Regional High School are from the 2005 YRBS.

[c] YRBS or TAP data for Hanover, Lisbon, Profile, and Woodsville High Schools are unavailable for 2005 and 2007.

[d] Data for Linwood, Newfound Regional, and Plymouth Regional High Schools are from the 2007 TAP.

Prevalence of Mental Illness

Research has consistently found that rural and urban youth have similar rates of mental illness.[17] However, it appears that suicide is considerably higher among rural than urban adolescents, which could be indicative of the limited availability of mental health care in rural areas.[18] Factors similar to those that increase the risk of substance abuse, such as poverty, high unemployment rates, low educational attainment, loneliness, and a sense of overwhelming isolation, are also linked to mental illness, suicide ideation, and suicide.[19]

Research has consistently found that rural youth have a great unmet need when it comes to mental health services. Nationwide, Ellis and colleagues, for example, found that rural, low-income counties had the greatest need for more mental health providers. In New Hampshire, they found that Coos County has the greatest need, followed closely by Carroll and Grafton counties.[20] Others have found that rural youth are 20 percent less likely than urban youth to visit mental health services when needed.[21] It seems likely that the rural–urban disparity in seeking mental health services can be attributed to the relative lack of adequate mental health services in rural areas. The lack of psychiatric inpatient services and child psychiatrists is a particular problem in rural areas.[22] Most rural residents must travel more than an hour to the closest mental health services, leaving those without transportation few options.

Another key factor inhibiting rural youth from seeking appropriate mental health treatment is the lack of anonymity in small, rural towns and fear of stigma.[23] Furthermore, the lack of availability of mental health treatment may lead youth to self-medicate—further emphasizing the intercon-

nectedness of these two problems. This can lead to a vicious cycle of mental illness, substance abuse, and the criminal justice system. Unfortunately, treatment services that holistically address both substance abuse and mental health are rare in rural areas.[24]

Table 3 presents three measures of youth mental health in the North Country: depression, suicide ideation, and suicide attempts. North Country youth reported comparable rates of depression and suicide ideation to the state as a whole, but they reported higher rates of suicide attempts. As with substance use, there is considerable variation in mental health among North Country youth both across and within Carroll, Coos, and Grafton counties. Further research should examine the causes for this variation.

Web-Based Survey of Youth Service Providers

We conducted a Web-based survey with 105 North County youth service providers about the strengths and weaknesses of mental health and substance abuse services currently available for youth in Carroll, Coos, and Grafton counties. The survey included questions about the extent of substance abuse problems and mental illness among youth and the importance of substance abuse and mental health services for youth in the area. We asked those who directly provide substance abuse or mental health services about the effectiveness and quality of current services, and we asked all other youth service providers about their awareness of and ability to refer youth to existing mental health and substance abuse services. We gathered contact information through a snowball sample beginning with known and recommended prominent youth service providers and organizations in the North Country and encouraged recipients to pass the survey along to other participants. Although beneficial for contacting a large number of key personnel, this method precludes calculating an accurate response rate. However, of those who opted to begin the survey, 88 percent completed it.

The findings are representative of a wide array of different types of youth service providers and different service provider roles.[25] Often providers' services were located in several counties across New Hampshire. However, youth service providers were fairly equally represented in the three counties: 38.1 percent of respondents provided services in Carroll County, 38.1 percent were in Coos County, and 48.6 percent were in Grafton County. The majority of respondents (96.2 percent) reported working with high school–age adolescents.

Need for Substance Abuse and Mental Health Services

Approximately seven in ten respondents report that substance abuse is "considerably" or "very much" a problem for youth in the North Country. Additionally, the majority of respondents (65 percent) in Carroll, Coos, and Grafton counties report that mental illness is an issue for youth in this area. Compared with all other types of services available for youth, 62 percent of respondents report that substance abuse services are "very important," and 75 percent consider mental health services to be "very important."

Referring Youth to Appropriate Services

Among the youth service providers surveyed, 55 percent report they do not directly provide substance abuse or mental health treatment. Rather, they often refer youth to these services. Fortunately, the majority of youth service providers in this position are aware of the resources that exist in their communities. Nearly eight in ten (78 percent) of those who do not provide substance abuse or mental health services are "aware" or "very aware" of the substance abuse services in their communities, and 90 percent report being similarly aware of the mental health services in their communities. Indeed, 83 percent of youth service providers in the position to potentially refer youth to the appropriate mental health or substance abuse services have done so. Among these providers, only 35 percent report referring youth to substance abuse services "frequently" or "very frequently." In contrast, 52 percent report referring youth to the appropriate mental health services.

Nearly all (92 percent) of those who have referred youth to substance abuse or mental health services say the process is "difficult." Service providers seem more aware of the current mental health services than substance abuse services. They also find it easier to refer youth to mental health services and, hence, do so more frequently.

The biggest challenges in referring youth to either service is a lack of nearby services, fragmented services, and families' limited financial resources (see Figure 1). Overall, it appears that youth service providers are very aware of the substance abuse and mental health services that exist, but they are also aware of the various barriers that constrain youth from taking full advantage of them.

Figure 1: Biggest obstacle in referring youth

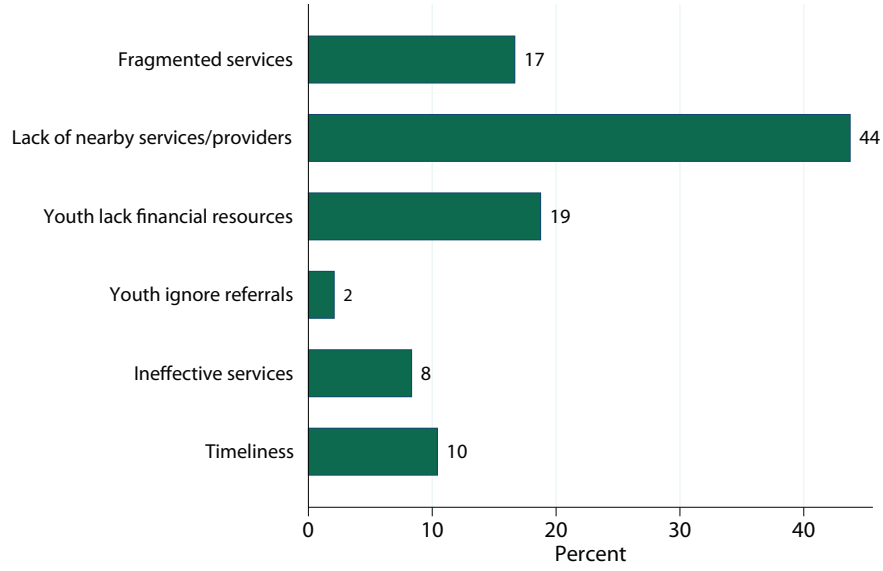
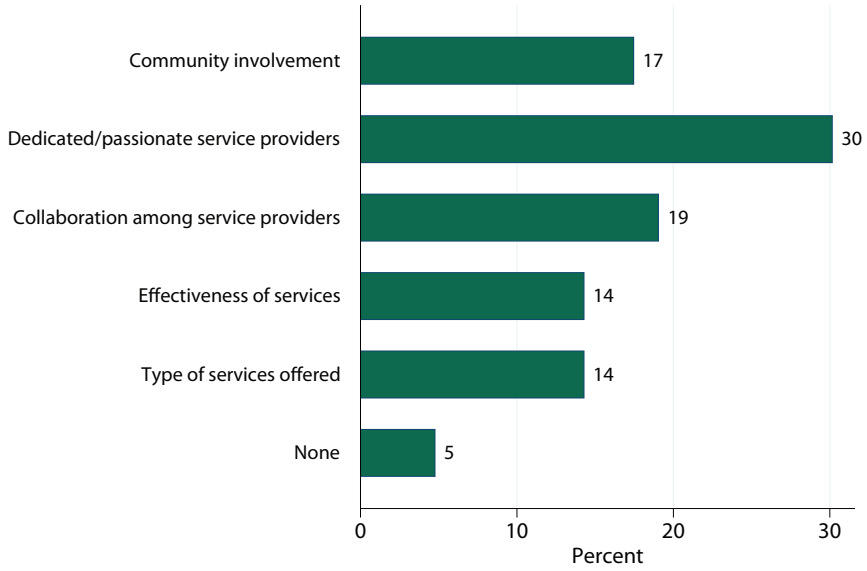


Figure 2: Strengths of current services



Current Services

Slightly less than half (45 percent) of survey respondents directly provide substance abuse or mental health services. Four in ten of these respondents report that current substance abuse and mental health services are "below average" in the North Country. Notably, 30 percent report that the main strength of local services is the passion and dedication of current service providers (see Figure 2). This is not surprising given the close-knit communities in many small rural areas. The providers surveyed report that the weaknesses of the current mental health and substance abuse services include limited funding for existing services, a shortage of mental health and substance abuse providers, and too few services or programs. Other weaknesses include the long distances youth must travel for services and the lack of financial assistance for those who need it (see Figure 3).

Although barriers exist, most respondents believe that service providers are doing an extraordinary job. When asked what one thing would most improve the current services, the majority of service providers report they would like to see an increase in the number of mental health and substance abuse professionals, more funding, and a greater variety of services (see Figure 4). This indicates that in addition to increased financial resources, substance abuse and mental health services could also benefit from a restructuring of current services.

Figure 3: Weaknesses in current services

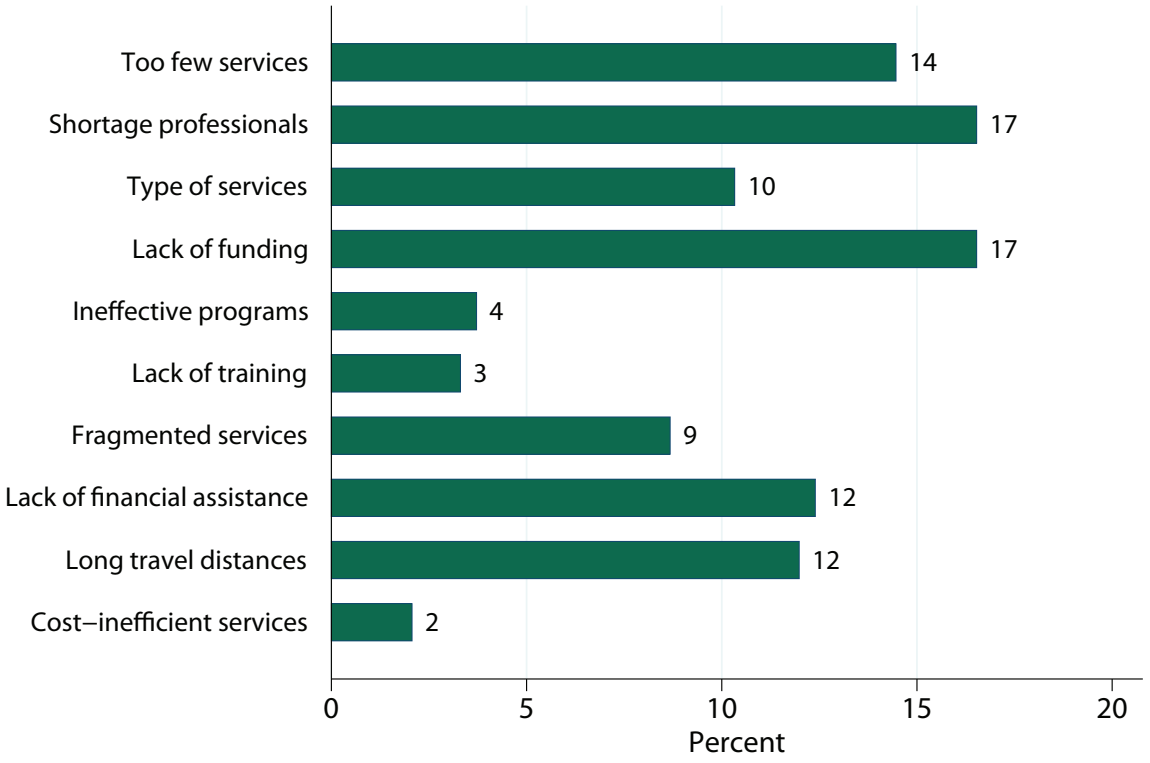
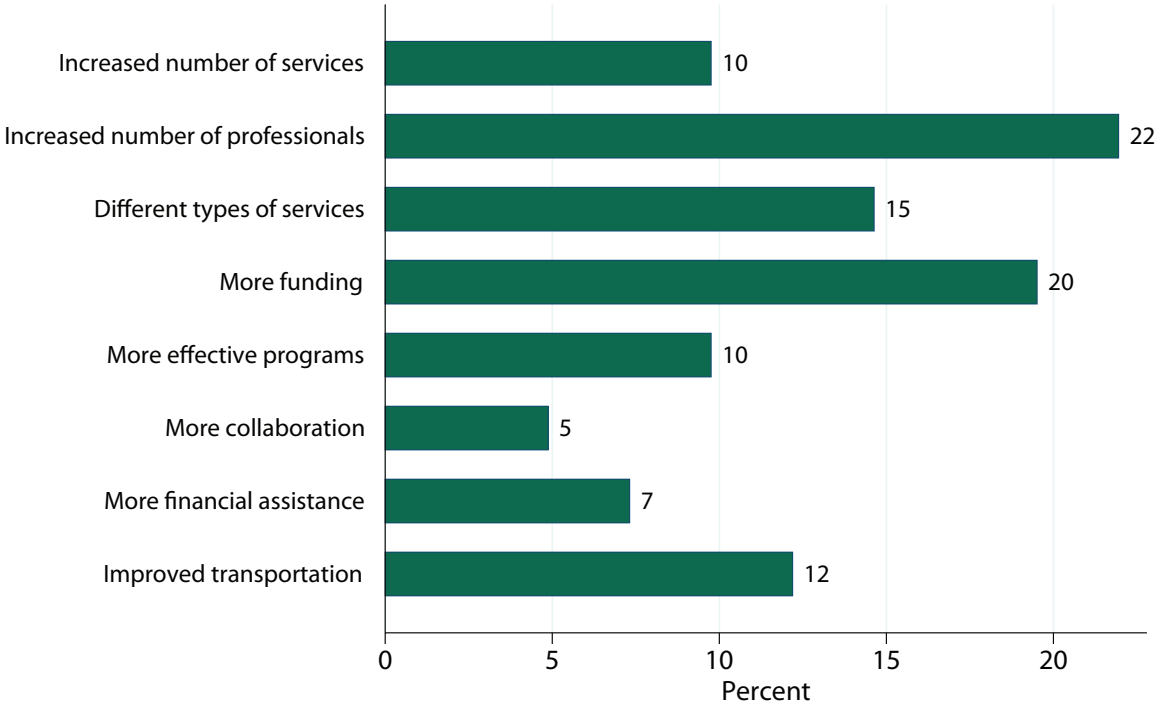


Figure 4: What would most improve current services?



Reorganizing the "Unsystematic" System

We also asked respondents whether they would be willing to participate in a more in-depth interview. Thirty-one percent volunteered to do so, further illustrating the devotion and passion of these service providers to improving youth services in their area. We interviewed eleven. Based on the interviews and the open-ended comment section of the survey, reorganizing the system and putting youth in leadership positions are what providers consider the most effective ways to improve the current services in the North Country.

Many interviewees note that the main problem is a lack of collaboration between all youth services, including the school systems, the juvenile justice system, medical services, and social and recreational programs. Frequently they note how the substance abuse and mental health system in the North Country is not really a system at all. Rather, it is fragmented and unsystematic. As one respondent said, "A survey like this can't really capture the nature of the problem, which is systemic. The 'system' (if you want to call it that) needs a complete overhaul, to eliminate redundancy, inefficiency, and outdated approaches, and to provide the kinds of services that had been shown—elsewhere—to be most effective."

Overall, service providers speak very highly of many of the youth programs in the area but argue that many are directed toward preventive efforts, not treatment. This leaves those who are most in need with few, if any, means for help. Interviewees lament the lack of adequate and consistent funding sources for services known to be effective. Often grants and donations fund the start-up costs for these programs, but those funds dwindle or disappear once the program establishes itself as an effective support for youth. This leads to an unfortunate cycle of programs being curtailed shortly after they are established, leading to frequent reorganization and instability among youth substance abuse and mental health services. Hence, although there are many dedicated, hardworking service providers and well-designed programs, they are too limited and unstable and often lack the consistent funding needed to be as successful as they could be.

A lack of qualified providers is also a problem related to the "nonsystem" of services. All providers interviewed report that youth service providers in the North Country, themselves included, are often overburdened and overwhelmed. This shortage of providers leads to high turnover, which only exacerbates the instability of existing services. Respondents emphasize the importance of building trust between client and provider, which program stability helps foster. Interviewees also note the difficulty in recruiting qualified youth service providers due to the limited funding. As one service provider commented, "Providers can't afford it . . . you have be crazy like me to stay here." The lack of providers often leads to long waiting lists—even for suicidal youth. Overall, respondents agree that a total reorganization of the current system is needed. The current innovative program ideas and passionate service providers could combine with more integrative services and consistent funding to greatly improve the well-being of North Country youth.

Putting Youth in Charge

Many respondents say that boredom and isolation are crucial issues affecting youth in this area. Although numerous recreational and social programs are available for youth, the majority of programs focus on younger children. In addition, there are very few part-time jobs in the areas, and providers say this is a main reason that drug manufacturing and sales is such a popular alternative.

One respondent added, "I think there needs to be more of an emphasis on accountability with teens by challenging them and their behaviors"—a common sentiment among other respondents as well. Another key theme that emerges is the desire to give youth greater say in their own prevention and treatment services. In conjunction with a more integrative system, service providers would like to see the North Country more readily embrace programs with youth in positions of leadership, such as mentoring programs and youth centers. These services, they say, would provide youth with a sense of responsibility, community, and respect. Respondents also say that youth providers should listen more to what youth say they need and give them more autonomy in choosing their own treatment plans. They believe that such an approach would make young people more invested in their own treatment, making it more effective.

Best Practices

The respondents' ideas for a more integrated system and for involving youth in their own treatment and support coincide with the evidence-based research. Best practices in substance abuse and mental health services are based on a collaborative and community-based system incorporating both mental health and substance abuse services. According to the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Administration, the best prevention and treatment practices are based on a well-integrated "system of care," where "mental health, education, child welfare, juvenile justice, and other agencies work together to ensure that children with mental, emotional, and behavioral

problems and their families have to access to the services and supports they need to succeed."[26] In addition, any effective approach to substance abuse and mental health services must incorporate, not ignore, the effective local resources, expertise, and services that exist in the community.[27]

Service providers in the North Country praise many local programs for promoting positive youth well-being based on interagency collaboration. Although far from an inclusive list, respondents repeatedly mention particular services as being exceptionally effective. These include the Whole Village Resource Family Center in Grafton County, which promotes collaboration between health and human service agencies. In conjunction with this, a large majority of nonprofit agencies in the greater Plymouth area hold monthly meetings to discuss how they can better meet the needs of their community, especially youth. Interviewees report this approach has been an invaluable tool in ensuring more effective youth services. Furthermore, they believe it sets Grafton County apart from Carroll and Coos counties.

Numerous service providers, both in and beyond Grafton County, also mention the successes of the Pemi-Youth Center, a youth-run afterschool program focused on positive youth and community well-being. They also note the Communities for Alcohol-and Drug-free Youth (CADY), an organization focused on preventing and reducing youth drug use and promoting "healthy environments and promising futures for area teens."

Similarly, several respondents would like to see the Carroll County Restorative Justice Center (CCRJC) model emulated on a larger scale, with more consistent funding. The CCRJC is a comprehensive program that entails juvenile court diversion, mediation, and counseling for both victims and offenders. Other exemplary programs include the Eagle Academy, an alternative high school; Valley Outreach, a drug prevention coalition targeted toward youth; and the Girl Scouts of the White and Green mountains. These programs serve youth in the Carroll County area and beyond.

In Coos County, nearly all respondents note the importance of Northern Human Services (NHS). NHS is a nonprofit provider of comprehensive mental health care, including substance abuse treatment and prevention. Respondents praise NHS for its ability to see patients in a timely fashion and help youth with financial limitations. Respondents also note that NHS is able to achieve this despite very limited resources.

Respondents also say, however, that achieving these benefits despite very limited resources and structural support is an anomaly. More typically, they say, the majority of service providers in the area are doing "the best they can with as little as they have." They also note that the majority of programs focus on prevention, not treatment. Finally, all agree that the area needs more mental health and substance abuse services for youth.

Clearly, North Country youth service providers are very dedicated and passionate about their work. All providers interviewed spoke very highly of other providers and were acutely aware of the strengths and weaknesses of current services. The knowledge and dedication of these providers are also evident in their detailed and in-depth discussions of successful, nationally recognized evidence-based practices. Most respondents had clearly done their research regarding the most effective youth programs. Nearly all respondents mentioned the Milwaukee Wraparound Model as an example of a program they would ideally like to see become available to youth in the North Country. The program is comprehensive and flexible and incorporates the child welfare, school, and juvenile justice systems in addressing the often co-occurring problems of substance abuse and mental illness.[28]

Numerous service providers also would like to see a program similar to Big Brothers, Big Sisters and one of its subsidiaries, Project Mentor, implemented in the North County. Respondents believe that both programs allow youth to feel more connected to their community and to feel they can give something back to it. Research has found that both of these programs significantly reduce drug and alcohol use and improve school performance and lower violence.[29] Finally, a majority of interviewees mention youth entrepreneurship programs as a way to "put youth in charge." They say a program allowing youth to turn their own ideas into a business that serves their community has elsewhere been found to lower substance abuse and improve mental health. Again, respondents argue that this would not only teach youth invaluable life skills but also provide them with a greater sense of community belongingness, helping to offset the overwhelming sense of isolation and idleness rural youth often feel.

Conclusion

The prevalence of youth substance abuse and mental illness in the North Country along with the clear consensus among service providers about the lack of appropriate youth services underscore the importance of these issues for practitioners and policy makers alike. When it comes to designing improvements to the current services, the suggestions and opinions of the hardworking and dedicated service providers are critical. Any efforts to reorganize current services in this area should incorporate the opinions and suggestions of local service providers. It is important to not overlook the considerable variation between and within Carroll, Coos, and Grafton counties. Nevertheless, there are important lessons to be drawn from an examination of the North Country as a whole about the challenges and opportunities in the region. As one respondent notes, "Although the North is very diverse, all three counties

have the potential to, and should, pool resources and work together—using the successful areas as examples for the not so successful ones . . . This is necessary for this area's youth and future."

ENDNOTES

1. David Lambert, Erika Ziller, and Jennifer Lendardson, "Use of Mental Health Services by Rural Children" (Portland, ME: University of Southern Maine, Edmund S. Muskie School of Public Service, Institute for Health Policy, Maine Rural Health Research Center, 2008); Lisa Pruitt, "The Forgotten Fifth: Rural Youth and Substance Abuse," *Stanford Law and Policy Review*, vol. 20 (2009), 101–148.

2. Tyrone Borders and Brenda M. Booth, "Research on Rural Residence and Access to Drug Abuse Services: Where Are We and Where Do We Go?" *Journal of Rural Health*, 23 (2008), 79–82; Lambert, Ziller, and Lendardson, "Use of Mental Health Services by Rural Children."

3. Elizabeth H. Hawkins, "A Tale of Two Systems: Co-Occurring Mental Health and Substance Abuse Disorders Treatment for Adolescents," *Annual Review of Psychology*, 60 (2009), 197–227.

4. We focus on this age group to ensure consistency with Anne Shattuck's prior research. See Anne Shattuck, "Navigating the Teen Years: Promise and Peril for Northern New Hampshire Youth," Issue Brief No. 12. (Durham, NH: Carsey Institute, University of New Hampshire, 2009).

5. Chris Colocousis, "The State of Coos County: Local Perspectives on Community and Change," Issue Brief No. 7 (Durham, NH: Carsey Institute, University of New Hampshire, 2008); Kenneth Johnson, *The Changing Faces of New Hampshire: Recent Demographic Trends in the Granite State*, A Carsey Institute Report on New England (Durham, NH: Carsey Institute, University of New Hampshire, 2008); Shattuck, "Navigating the Teen Years."

6. Shattuck, "Navigating the Teen Years."

7. The 2007 NH YRBS is conducted by the New Hampshire Department of Health and Human Services. State and national YRBS rates were obtained from the Centers for Disease Control and Prevention. The 2007 TAP is conducted by Communities for Alcohol-and Drug-free Youth of Plymouth.

8. Karen Van Gundy, *Substance Abuse in Rural and Small Town America*, A Carsey Institute Report on Rural America (Durham, NH: Carsey Institute, University of New Hampshire, 2006).

9. Pruitt, "The Forgotten Fifth."

10. Ibid.; David Lambert, John A. Gale, and David Hartley, "Substance Abuse by Youth and Young Adults in Rural America," *Journal of Rural Health,* 24 (3) (2008), 221–228.

11. Anastasia Snyder and Diane McLaughlin, "Rural Youth are More Likely to be Idle." Fact Sheet No. 11 (Durham, NH: Carsey Institute, University of New Hampshire, 2008); Van Gundy, *Substance Abuse in Rural and Small Town America*.

12. Lambert, Gale, and Hartley, "Substance Abuse by Youth and Young Adults in Rural America"; David Hartley, "Substance Abuse among Rural Youth: A Little Meth and a Lot of Booze" (Portland, ME: University of Southern Maine, Edmund S. Muskie School of Public Service, Institute for Health Policy, Maine Rural Health Research Center, 2007).

13. Van Gundy, *Substance Abuse in Rural and Small Town America*.

14. Kenneth Johnson, *Demographic Trends in Rural and Small Town America*, A Carsey Institute Report on Rural America (Durham, NH: Carsey Institute, University of New Hampshire, 2006).

15. Bridget S. Ruiz et al. "Treatment Issues and Outcomes for Juvenile-Justice-Involved Youth from Rural and Nonrural Areas," *Prison Journal*, 85 (1) (2005), 97–121.

16. Pruitt, "The Forgotten Fifth"; Van Gundy, *Substance Abuse in Rural and Small Town America*.

17. Lambert, Ziller, and Lendardson, "Use of Mental Health Services by Rural Children."

18. Jameson K. Hirsch, "A Review of the Literature on Rural Suicide: Risk and Protective Factors, Incidence, and Prevention," *Crisis*, 27 (4) (2006), 189–199.

19. Hirsch, "A Review of the Literature on Rural Suicide."

20. Alan R. Ellis et al. "County-Level Estimates of Mental Health Professional Supply in the United States," *Psychiatric Services*, 60 (10) (2009), 1315–1322. Ellis used data from professional associations, state licensure boards, and national certification boards and compared this with county population size.

21. Lambert, Ziller, and Lendardson, "Use of Mental Health Services By Rural Children."

22. Lambert, Gale, and Hartley, "Substance Abuse by Youth and Young Adults in Rural America."

23. Pruitt, "The Forgotten Fifth."

24. Hawkins, "A Tale of Two Systems; Ruiz et al., "Treatment Issues and Outcomes."

25. For example, 7.6 percent of responding youth service providers identified their main area of work as athletics, 31.4 percent education, 27.6 percent the juvenile justice system, 21.9 percent the medical sector, 22.9 percent mental health services, 15.2 percent social or recreational organizations, and 26.7 percent substance abuse services. Regarding specific roles they held, 29.5 percent reported serving as a director or administrator, 11.4 percent a probation officer, 10.5 percent a teacher, 9.5 percent a medical practitioner, 8.6 percent a social worker, 7.6 percent a mentor, 6.7 percent a mental health practitioner, 6.7 percent a guidance counselor, 6.7 percent a volunteer, 5.7 percent a coach, and 1.9 percent a tutor.

26. David J. Hawkins and Richard Catalano, "Investing in Your Community's Youth: An Introduction to the Communities that Care System" (Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration and Center for Mental Health Services, 2005).

27. Rhonda Tsoi-A-Fatt, "A Collective Responsibility, a Collective Work: Supporting the Path to Positive Life Outcomes for Youth in Economically Distressed Communities" (Washington, DC: Center for Law and Social Policy, 2008).

28. *2008 Wraparound Milwaukee Year End Report.* Available at www.milwaukeecounty.org/BackgroundandHistory10149.htm (accessed November 9, 2009).

29. Joseph P. Tierney, Jean B. Grossman, and Nancy L. Resch, *Making a Difference: An Impact Study of Big Brothers Big Sisters* (Philadelphia: Public/Private Ventures, 1995).

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ACKNOWLEDGMENTS

The author would like to thank Peter C. Nordblom and Kristin Van Curan Nordblom for their generous support of this research and is very grateful for all of the North Country youth providers who kindly offered some of their very limited and invaluable time and provided such thoughtful, in-depth responses. Finally, the author would like to acknowledge the thoughtful comments provided by Mil Duncan, Curt Grim, Heather Turner, and Anne Shattuck on earlier versions of this brief.

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Carsey Institute *Reports on Tracking Change in the North Country* are supported by the Neil and Louise Tillotson Fund at the New Hampshire Charitable Foundation and the Carsey Institute endowment.

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