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Few and Far Between?

Children's Mental Health Providers in NH

September 2007

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About this paper

This report is one of a series published by the NH Center for Public Policy Studies on the broad topic of mental health in New Hampshire. The Concord-based Endowment for Health has sponsored this work.

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Children's Mental Health Workforce

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Executive Summary

According to the 1999 U.S. Surgeon General report, one in five children has a diagnosable mental health disorder, and the vast majority of these youth – even those with the most severe impairments – receive no or inappropriate care.[1] In New Hampshire, mental health practitioners have pointed to a shortage of providers, particularly child psychiatrists, as a primary cause of these unmet needs. These practitioners have described long waiting lists for appointments and the need for children living in rural areas to travel long distances for treatment. This paper provides an overview of the currently available data on mental health providers across the state.

The Availability of Mental Health Providers

The data presented here raises questions regarding whether the current state of the mental health workforce is sufficient to meet the needs of children. Half of all child psychiatrists – potentially the providers best qualified to serve the broadest set of children's mental health needs, including the provision of prescriptions – are located in the two southeastern counties of the state.

Conversely, the two northeastern counties – Carroll and Coos - do not have a child psychiatrist in practice. Not surprisingly, a significant part of Northern New Hampshire has been designated a mental health professional shortage area by the Health Resources Services Administration, in large part due to the absence of psychiatrists.

Furthermore, New Hampshire has the fewest child psychiatrists per child of the four most northern New England states. In fact, when you look at all the primary providers of mental health prescriptions to children – psychiatrists, family practitioners and pediatricians – New Hampshire ranks the lowest in Northern New England.

However, a larger – albeit poorly documented – pool of mental health providers other than psychiatrists exists, most commonly child psychologists, school psychologists, and clinical social workers and mental health counselors.

Based on the data available, it is clear that schools are a critical component of the mental health workforce for children. While there is less than one child psychiatrist per 10,000 children and fewer than four psychologists in the state per 10,000 residents, on average, there are more than 10 school psychologists per 10,000 students.

Workforce Data is Limited

The data on the mental health work force is limited. Data on psychiatrists, pediatricians and family practitioners is collected by the American Medical Association each year and counts are available for every county in the state. A survey of providers in a number of

[1] U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General—Children and Mental Health*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999. Hereafter referred to as, *Surgeon General's Report, 1999*.

communities in New Hampshire demonstrated that this data, while providing comparable estimates across geographic areas, may over-estimate the numbers of these types of providers due to the lack of precision of the data.

Moreover, information on other providers – clinical social workers and school psychologists among others – is limited in scope and of limited use to policy makers. As the practice patterns of the field change, focusing more on the critical role that providers other than psychiatrists play in mental health, more accurate data will need to be collected for information investments in, and policies involving, the Mental Health workforce. The data that do exist – mainly from state licensing authorities – have several significant limitations, among them, that they were not collected for the purpose of estimating workforce adequacy.

Implications

At a minimum, these data raise questions as to whether there are shortages of some or all types of children's mental health providers. However, there is limited research on what the most effective number of mental health providers is to meet treatment demands. This makes it difficult to draw any definitive conclusions regarding sufficient workforce capacity. To better understand the supply of and demand for the mental health care workforce, additional information is needed about mental and behavioral health care professions and issues.

About the data

These analyses relied on data from a variety of data sources. For information on psychiatrists, pediatricians, and family practitioners, we relied on the Area Resource File, 2005, which includes data from the American Medical Association for these specialists. For information on school psychologists, we relied on data from the Department of Education which has responsibility for licensing school psychologists. For the other providers, we used data from the New Hampshire Board of Mental Health Practice. This board regulates the licensure and practice of five disciplines: psychologists, clinical social workers, clinical mental health counselors, marriage and family therapists, and pastoral psychotherapists. Furthermore, the New Hampshire Board of Nursing provided the number of psychiatric nurse practitioners currently licensed. All licensing board data was current as of May 2007.

Defining the Children's Mental Health Workforce

Mental health services are delivered by a wide variety of providers: child psychiatrists, psychologists, clinical social workers, psychiatric nurses, licensed counselors and therapists, case managers, aides, and technicians. The current workforce recognizes a broadening of the concept of the mental health workforce to include professionals with graduate level training – including physicians – as well as those with even less formal education.[2]

An expanded definition of the mental health workforce would also include teachers, school aides, juvenile justice workers, child welfare workers, volunteers, people in recovery, and their family members.[3] The National Technical Assistance Center for Children's Mental Health at Georgetown University has referred to family members as "the untapped army waiting in the wings to partner with professional providers in the mental health care of their children." However, to capture this dimension of the mental health workforce is beyond the scope of this report.

In this analysis, we have tried to capture workforce statistics for a variety of different providers. A primary distinction often made in the workforce literature is those who can prescribe drugs and those who can not. This distinction is important because children's mental health treatments typically involve a combination of drug and psycho and/or behavioral therapy. Professionals who can provide both types of treatment, such as psychiatrists, are arguably the most qualified of all child mental health professionals. In New Hampshire, three types of providers may prescribe medication: physicians – including psychiatrists, pediatricians, and family practitioners – advanced registered nurse practitioners, and physician's assistants. Non-prescribing mental health service providers are licensed by the New Hampshire Board of Mental Health Practice, which includes differing types of clinical psychotherapists.

Mental Health Providers Who Prescribe Medication

The Psychiatry Workforce

In New Hampshire, as of 2004, there were 173 psychiatrists involved in patient care. Thirty-two of these were child psychiatrists. This figure represents less than one physician per 10,000 children across the state. Although some of the 173 psychiatrists may treat children, they lack the additional two years of training in child psychiatry required for board certification.[4]

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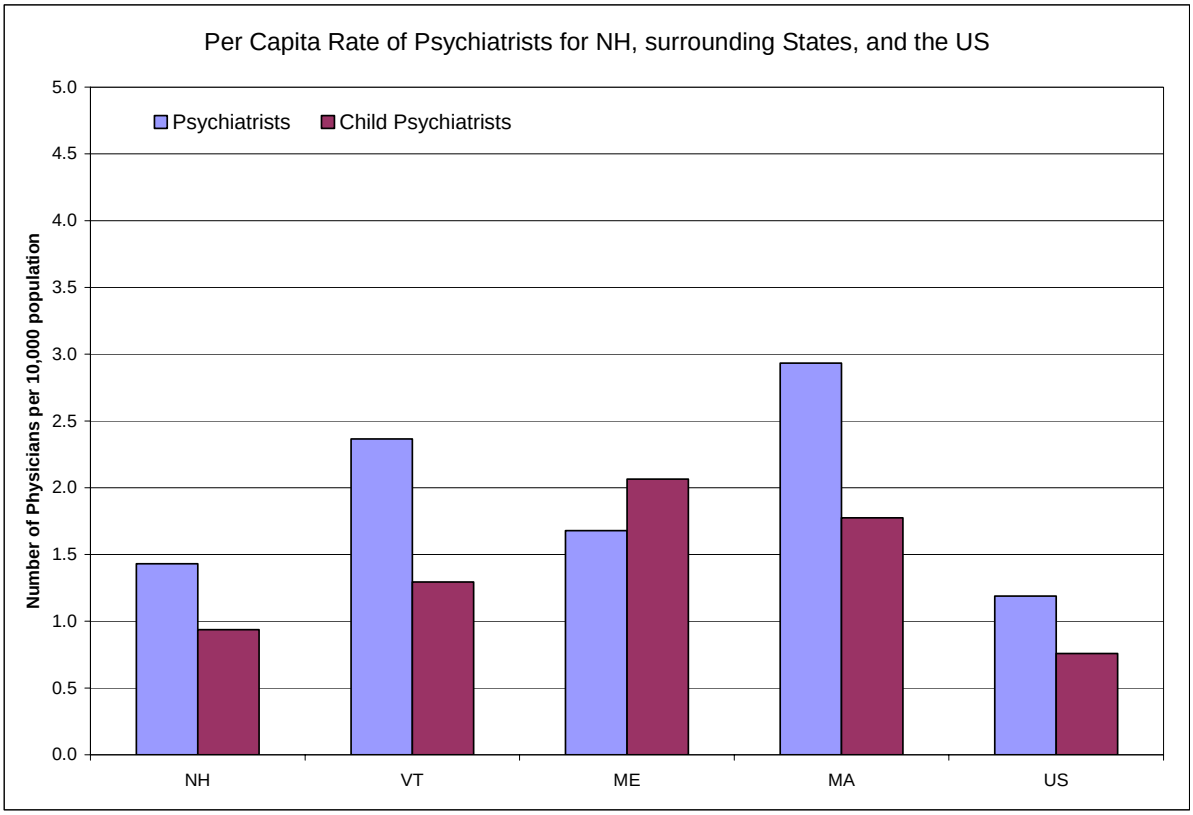
[2] Annapolis Coalition. An action plan for behavioral health workforce development: A framework for discussion. Rockville, MD: Department of Health and Human Services. SAMHSA/DHHS Publication No. 280-02-0302. 2007. Hereafter referred to as, *Annapolis Coalition, 2007.*

[3] Ibid.

[4] The American Board of Psychiatry and Neurology. "Initial Certification in the Subspecialty of Child and Adolescent Psychiatry." www.abpn.com/cap.htm. Accessed 28Aug2007.

The following figure shows how the psychiatry workforce in New Hampshire, select New England states, and the United States as a whole compares. New Hampshire has the lowest per capita rates of child psychiatrists in Northern New England.

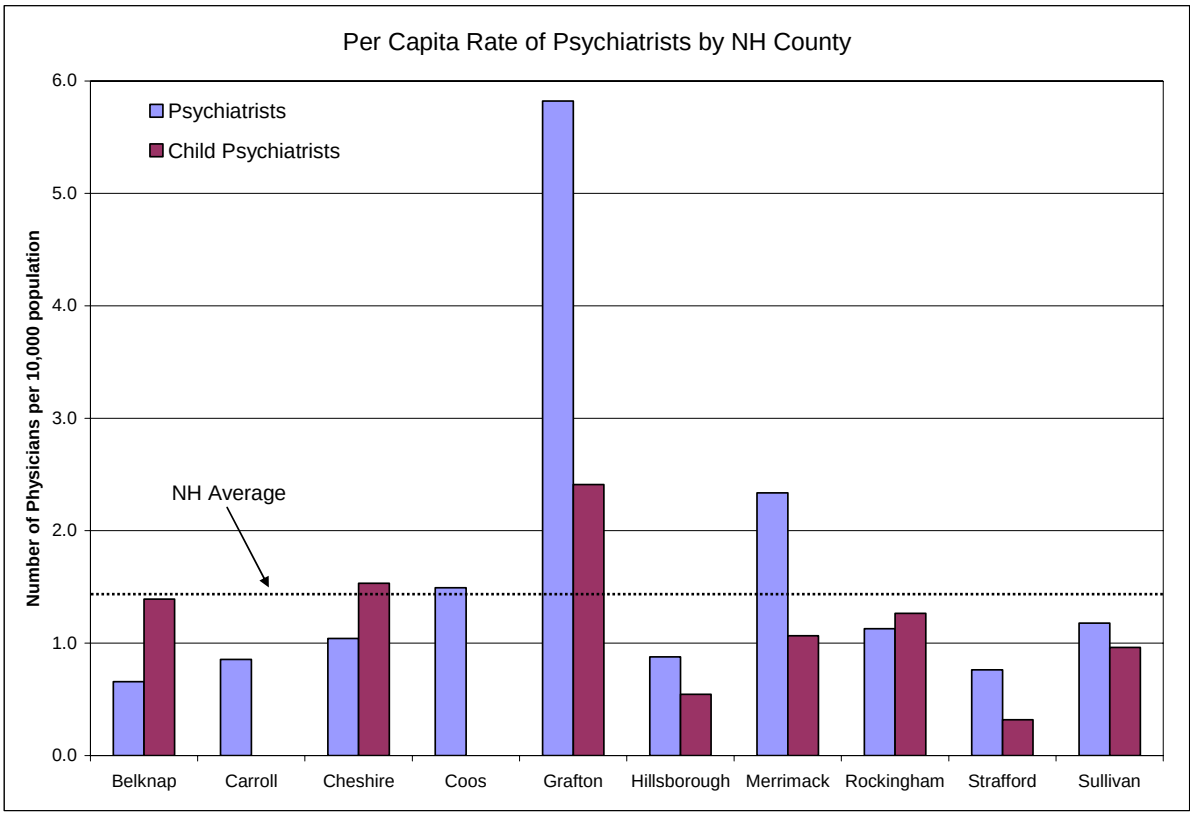
Figure 1



Psychiatrists are also unevenly distributed across the state of New Hampshire, with the highest concentration being in the central and southern parts of the state. Two of the ten New Hampshire Counties – Carroll and Coos – have no child psychiatrists. And, two counties – Strafford and Sullivan – have just one each.

Figure 2 provides the per capita rate of the psychiatry workforce by county. The number of child psychiatrists range from a high of more than 2 per 10,000 children in Grafton County, to zero in both Carroll and Coos Counties.

Figure 2



Professionals in the field have described, anecdotally, long waiting lists for appointments, and the need for rurally situated children to travel great distances in order to receive care. For families lacking adequate transportation and/or who have inflexible employment schedules, this constitutes a hardship. The distance barrier may prevent certain children from seeking care until their illness is severe or from receiving services altogether. One school psychologist reported anecdotally that in order for a child to gain immediate access to a child psychiatrist, the child's situation must often rise to a level of crisis proportions, such as if the child is suicidal, homicidal, has committed a criminal offense, or is the subject of a formal Children in Need of Services (CHINS) petition.[5]

Pediatricians & Family Physicians

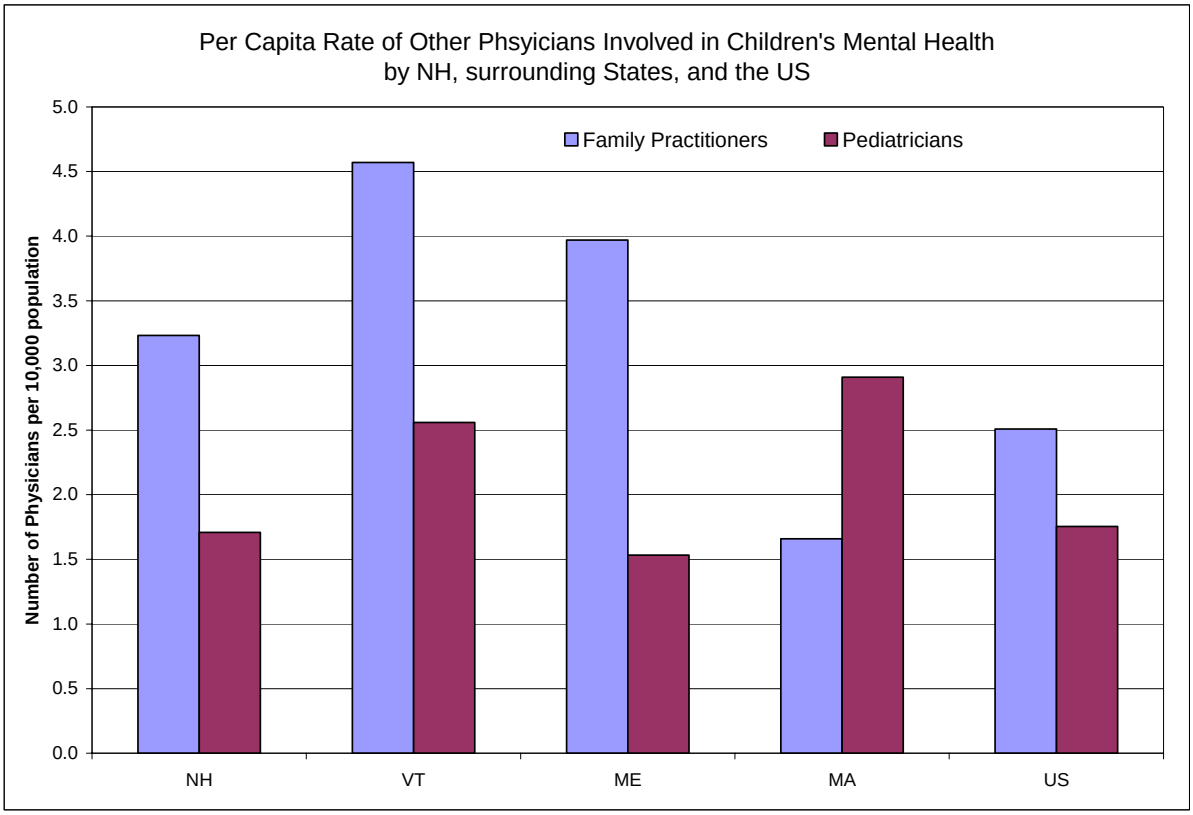
Pediatricians and family physicians increasingly are becoming involved in the care of children with mental health disorders. From 1979 to 1996, the rate of psychosocial problems discovered by pediatricians increased from 7% to 19% of all office visits by children. And, 85% of all psychotropic medications taken by youth are now prescribed by pediatricians.[6]

As Figure 3 illustrates, New Hampshire has more physicians per child when looking at the number of family practitioners and pediatricians. In general, New Hampshire has more

[5] Interview with Peter Rahlson, June 2007.
[6] J Koppelman. "The Provider System for Children's Mental Health: Workforce Capacity and Effective Treatment" The National Health Policy Forum. NHPF Issue Brief: No. 801. October 2004. Hereafter referred as, *Koppelman 2004.*

family medicine doctors and about the same number of pediatricians per capita as the U.S. in total. Compared to the states that border New Hampshire, Vermont and Maine have a greater per capita rate of these providers and Massachusetts fares about the same in total.

Figure 3



Psychiatric Nurse Practitioners and Physician Assistants

In New Hampshire, both Advanced Registered Nurse Practitioners and Physician Assistants have the authority by law to prescribe and dispense medications.

In certain New Hampshire communities, nurse practitioners play a significant role in prescribing psychotropic medication. And, several Community Mental Health Centers rely on them almost exclusively.[7] According to the NH Board of Nursing, there are 145 active licensed psychiatric nurse practitioners across the state. Data regarding their geographic location, however, is not publicly available.

In addition, experts have estimated that the majority of states are currently experiencing nursing shortages, and they predict that all 50 states will experience a nursing shortage over the next few years.[8] New Hampshire is among the states that are currently facing nursing shortages. In the area of psychiatric nursing, nationally, although the number of individuals

[7] Interview with Mary Brunette, State Mental Health Medical Director.
[8] Ibid.

entering and exiting the field is roughly equivalent, the enrollment of nurses in graduate psychiatry training is declining.[9]

Presumably, physician assistants play a significant role in prescribing care for children's mental illnesses. However, data regarding the scope of physician assistants working in mental health is not available.

Mental Health Providers Who Do Not Prescribe Medication

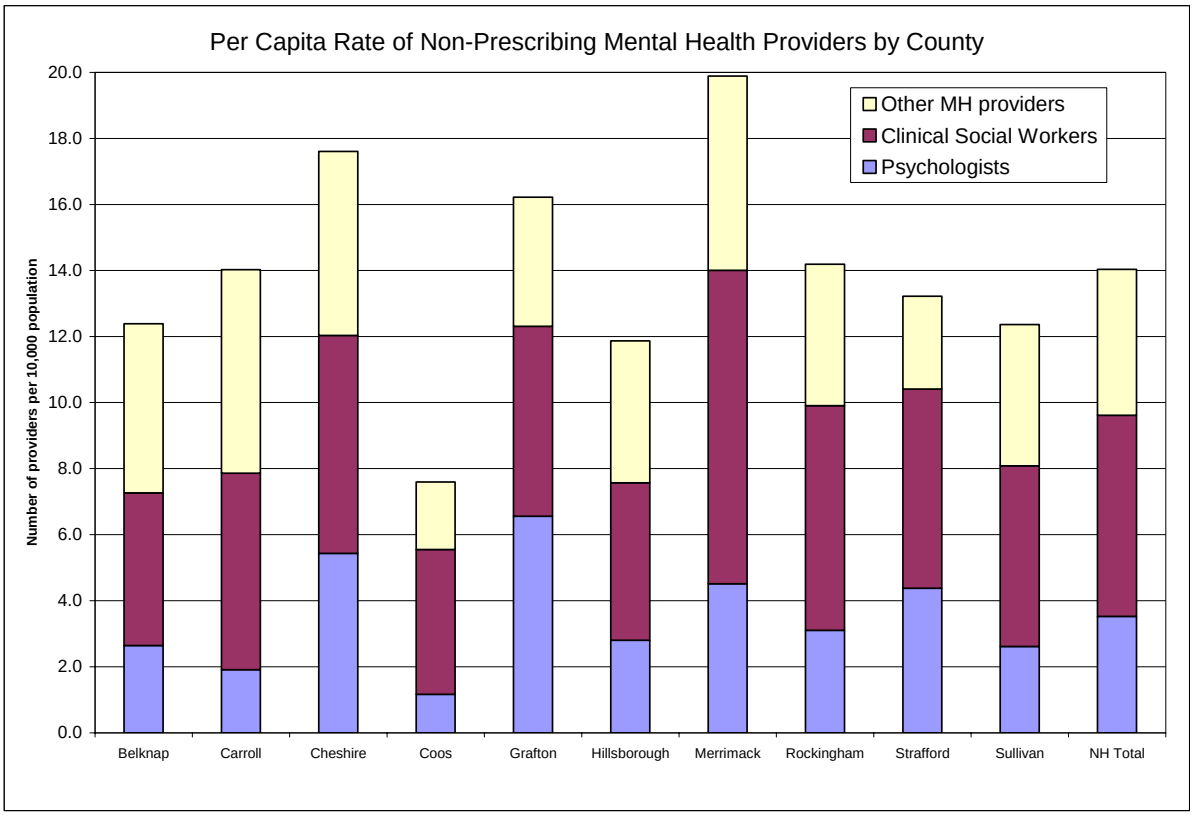
The New Hampshire Board of Mental Health Practice regulates the licensure and practice of five disciplines: psychologists, clinical social workers, clinical mental health counselors, marriage and family therapists, and pastoral psychotherapists. The Board maintains basic data on these practitioners, including their licensure status (active or inactive), expiration date, and their preferred mailing address.

The Board's data constitutes the primary source of information on non-prescribing mental health providers in New Hampshire. And, like much of the workforce data, it has several limitations. Foremost, it was not collected for the purpose of estimating workforce capacity. The preferred mailing address may not be the town where the provider actually practices. And, an active license status does not necessarily mean that the individual is currently providing mental health services. Moreover, the Board does not gather data on the providers' specialty (e.g., children and/or families, geriatrics, etc.). Therefore, it is not possible to determine the number of practitioners whose practices are devoted – in any extent – to serving children. Also, many providers have a preferred mailing address that lies in one of the three states bordering New Hampshire. A number of these providers may serve New Hampshire residents. Therefore, the state's mental health workforce may be larger than the New Hampshire totals alone indicate.

Figure 4 shows the per capita rates of active licensed providers, by type and county of their preferred mailing address. These totals only represent practitioners who are potential sources of mental health care in each county.

[9]Annapolis Coalition, 2007.

Figure 4[10]



As is evident in the tables, the total number and distribution of providers varies widely by county. Coos County shows a per capita number of providers below the state average.

Psychologists

Child Psychologists

New Hampshire requires that psychologists have obtained doctoral level training with supervised experience providing treatment before granting licensure. With an advanced graduate education, these providers have the highest level of training in psychotherapy of all non-prescribing mental health providers.

Table 1 shows a further breakdown of the number of licensed psychologists by county. It is important to re-emphasize the fact that these data represent all psychologists. It is unknown how many of these providers devote either all or part of their practice to children.

As was the case with child psychiatrists, the number of psychologists in Carroll and Coos counties is below the state average of more than 3 per 10,000 residents, at nearly 2 and 1 per 10,000 residents, respectively. Grafton County has nearly twice the state average per capita of licensed psychologists.

[10] Other MH providers refers to Clinical Mental Health Counselor, Marriage and Family Therapists, and Pastoral Psychotherapists.

Table 1[11]

Number of Psychologists and Per Capita Rate by County		
County	**Psychologists**	**Psychologists per 10,000 residents**
Belknap	16	2.6
Carroll	9	1.9
Cheshire	42	5.4
Coos	4	1.2
Grafton	57	6.6
Hillsborough	113	2.8
Merrimack	66	4.5
Rockingham	92	3.1
Strafford	53	4.4
Sullivan	11	2.6
Total NH	**463**	**3.5**

School Psychologists

School psychologists are also an important provider of mental health services to children in New Hampshire. They provide services ranging from evaluations to consultations to individual and group counseling. The amount of time allocated to each service type depends largely on individual school districts' philosophies, policies, and procedures.[12] School psychologists are required to have at least a Master's level training. Many are also licensed psychologists. Therefore, it is important to note that some providers maintain active licenses for both and may be included in each set of data.

The NH Department of Education maintains data on certified school psychologists and associate psychologists. Data includes license expiration date, employment status and employer: school and/or district. The following table shows the total number of school psychologists who were employed in each county during the 2006-2007 school year, as well as the number of school psychologists per 10,000 enrolled students.

As shown in Table 2, the state average of school psychologists was 10.3 per 10,000 enrolled students. Interestingly, the number in Coos County was well above the state average, with approximately 15 school psychologists per 10,000 enrolled students. And, Cheshire County had nearly double the state average, with a total of almost 20. It is important to note that not every district and/or school within a district employs a psychologist.

[11] An additional 123 licensed psychologists report a mailing address in one of the states bordering New Hampshire.
[12] Interview with school psychologists, Peter Rahlson and Julie Bassi, June & July 2007.

Table 2

Number of School Psychologists and Per Capita Rate by County			
County	**Total Employed School Psychologists and Associate School Psychologists[13]**	**Total Enrolled Students in County[14]**	**Total per 10,000 students**
Belknap	8	9,934	8.1
Carroll	6	6,608	9.1
Cheshire	20	10,657	18.8
Coos	8	5,130	15.6
Grafton	11	12,393	8.9
Hillsborough	68	66,135	10.3
Merrimack	20	21,222	9.4
Rockingham	47	48,795	9.6
Strafford	17	16,736	10.2
Sullivan	5	5,962	8.4
Total NH	**210**	**203,572**	**10.3**

Other Mental Health Providers

All other mental health providers licensed in New Hampshire require at least Master's level training in clinical psychology and, at minimum, 2 years of supervised clinical practice to receive licensure. Many of these providers have doctoral level training, such as for Pastoral Psychotherapists. Managed care organizations often prefer the use of these providers, particularly Clinical Social Workers, as the reimbursement rates are lower than those for psychologists. However, many of these providers have not completed the additional years of training required to be a licensed psychologist. This raises the question of whether the training in these disciplines is sufficient to treat children with mental illness.[15]

Table 3 presents the number of each type of provider and the per capita rate. As noted above, these data represent all mental health providers. It is unknown how many providers devote either all or part of their practices to children.

[13] Totals are as of 2006-2007 school year. School psychologists and associate school psychologists are combined, as they may perform the same functions. Per Department of Education credentialing requirements, the difference is that associate school psychologists must be supervised by another school psychologist.
[14] Enrollments include students in Public District Schools, Public Academies, Joint Maintenance Agreement and Public Charter Schools. These data do not include private school enrollment.
[15] Koppelman 2004.

Table 3

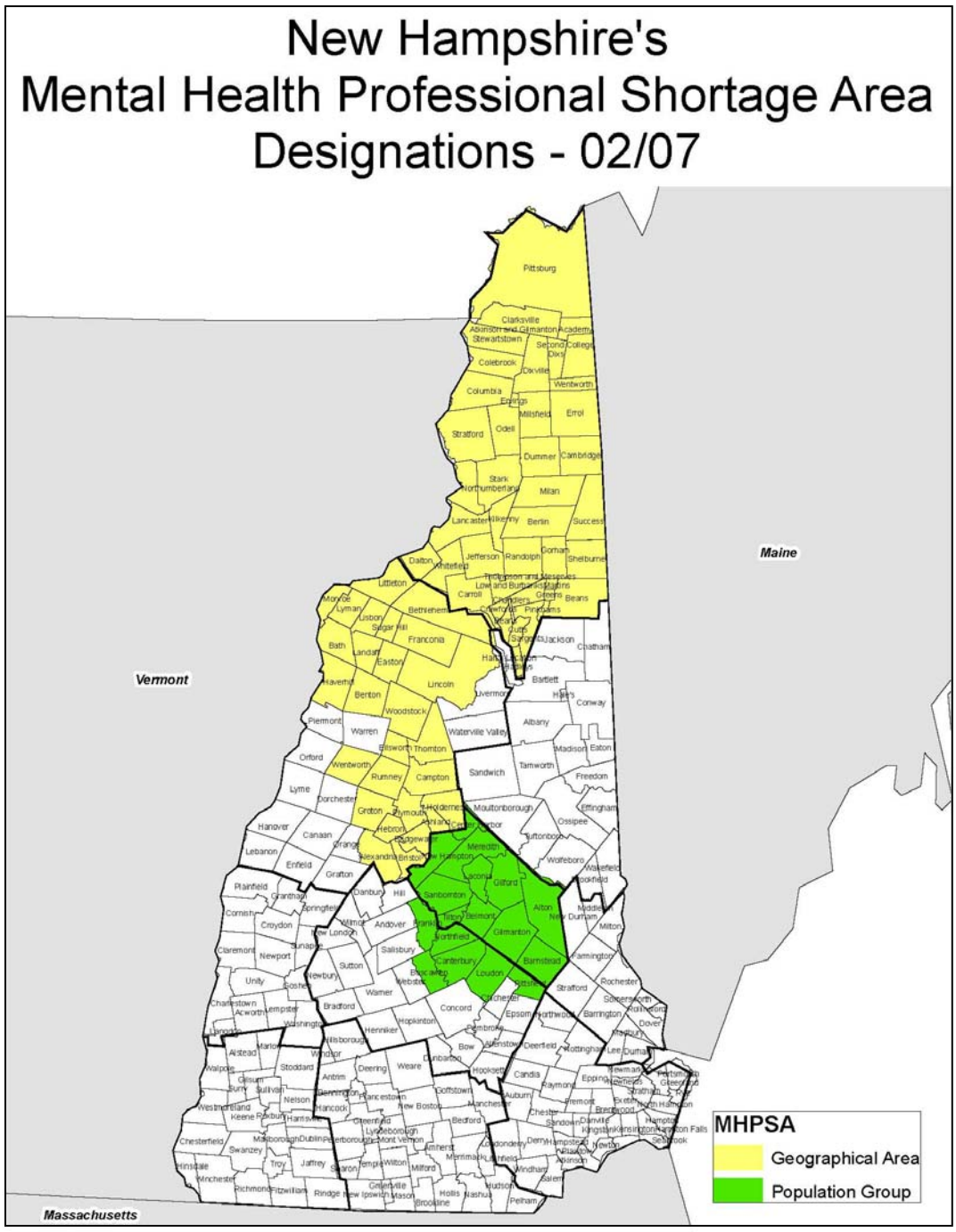
Number of Other Non-Prescribing Mental Health Providers and Per Capita Rate by Type and by County										
County	**Clinical Social Worker**		**Clinical Mental Health Counselor**		**Marriage & Family Therapist**		**Pastoral Psychotherapist**		**Total**	
	Number	Per 10,000 Residents	Number	Per 10,000 Residents	Number	Per 10,000 Residents	Number	Per 10,000 Residents	Number	Per 10,000 Residents
Belknap	28	4.6	27	4.5	2	0.3	2	0.3	59	10
Carroll	28	5.9	26	5.5	2	0.4	1	0.2	57	12
Cheshire	51	6.6	31	4.0	8	1.0	4	0.5	94	12
Coos	15	4.4	6	1.8	0	0.0	1	0.3	22	6
Grafton	50	5.8	28	3.2	3	0.3	3	0.3	84	10
Hillsborough	192	4.8	149	3.7	18	0.4	6	0.1	365	9
Merrimack	139	9.5	75	5.1	6	0.4	5	0.3	225	15
Rockingham	202	6.8	108	3.6	13	0.4	6	0.2	329	11
Strafford	73	6.0	24	2.0	10	0.8	0	0.0	107	9
Sullivan	23	5.5	16	3.8	2	0.5	0	0.0	41	10
Total NH	**801**	**6.1**	**490**	**3.7**	**64**	**0.5**	**28**	**0.2**	**1383**	**11**

Mental Health Professional Shortage Areas

One of the few benchmarks of adequacy against which the mental health workforce can be assessed is the Health Resources Services Administration (HRSA) designation of specific areas as mental health professional shortage areas (MHPSA). The HRSA develops shortage criteria and uses these criteria to decide whether or not a geographic area (and in some cases a medically underserved area or population) is a health professional shortage area (HPSA). An area that is designated as a HPSA can be eligible for significant federal funds and, in some cases, is given preference for funds. The explanation of the criteria for MHPSA can be found in the appendix.

As Figure 5 shows, a significant portion of the Northern part of New Hampshire has been designated a MHPSA.

Figure 5


New Hampshire's
Mental Health Professional Shortage Area
Designations - 02/07
Maine
Vermont
Massachusetts
MHPSA
Geographical Area
Population Group

Discussion

Despite the lack of a reliable, uniform data on the mental health workforce, experts have consistently reported a critical shortage of qualified children's mental health providers nationally in most practice areas: private practice, community clinics, public hospitals, and public mental health care systems that aim to keep troubled children and youth in the community.[16]

However, there is a wider variety of mental health providers than ever before, and a number of professions are in the process of redefining their roles. These shifts have been driven by a variety of different factors including changes in clinical practices, trends toward the use of professionals who are not specially trained in the field of children's mental health, and a major shift away from using psychiatric hospitals for seriously disturbed children. These changes, combined with the evolution of best practices and what is considered effective care, make it difficult to assess the workforce needs of the behavioral health community.

The problem of defining an 'appropriate' workforce is made more difficult by the fact that there is inadequate baseline data on the children's mental health workforce – both nationally and in the state of New Hampshire – to allow policymakers to assess its adequacy, to make accurate projections, and to compare among the various providers.[17] Traditional methods used for estimating workforce adequacy have several significant limitations. These methods have focused almost exclusively on the physician workforce. As a result, they have been unable to account for the unique characteristics of the many other mental health providers and the mental health workforce as a whole – the significant overlap of services, and the varying approaches and professional requirements of the various disciplines.

In addition, there is no single accepted way to obtain the data. And, the data – such as that obtained from periodic licensing surveys - are often incomplete, inadequate, and/or inaccurate. Although the National Alliance of Mental Health Professions has been working to develop uniform data, and to produce data that would be comparable across the various professions, there is still a long way to go before the data will provide policy makers with a precise assessment of the mental health workforce.

There are few clear-cut answers on the implications of these data on policies affecting mental health workforce development. The 2003 President's New Freedom Commission on Mental Health[18] described the need for "significant changes in practice models and in the organization of services to improve access, quality, and outcomes in mental health." However, exactly how many more of which type of providers are needed, as well as what constitutes optimum training for each discipline, is a complicated subject. Any potential solution will be closely tied to better information on the availability of providers of different

[16] Surgeon General's Report, 1999.
[17] Maine Center for Rural Health. "Addressing Mental Health Workforce Needs in Underserved Rural Areas: Accomplishments and Challenges," Working Paper 23. October 2001.
[18] New Freedom Commission on Mental Health, "Subcommittee on Rural Issues: Background Paper." U.S. Department of Health and Human Services. SMA-04-3890. Rockville, MD. 2004.

kinds, what kind of treatment is most effective for which mental health disorder, and who best can provide it.

To better understand the supply of, and demand for, the mental health care workforce, additional information is needed about mental and behavioral health care professions and issues:

- A better understanding of the system of care is needed to understand the relationship between the various service systems – the community mental health system, the schools, private physician providers, and the various providers of care to at-risk youth in the abuse and neglect system. A better understanding of the legal, legislative, and regulatory environment of and the demand for services within, the different aspects of the behavioral health system will begin to lay the groundwork for an assessment of the workforce needs.

- The mental health licensing and regulatory boards, including those focusing on health and human services and education, need to develop and maintain valid baseline occupational data for the mental health workforce through consistent, standardized collection and coordination between those agencies.

- The mental health workforce needs to be analyzed within the context of broad demographic changes that are occurring. The aging of the population will not only affect the supply of providers – as the workforce itself ages – but will also increase the competition for mental health providers. Demand for geriatric mental health care services will increase as the population ages, perhaps creating shortages in other parts of the system – including the system for children.

Appendix

Table A-1

Psychiatry Workforce, MD's only per 10,000 residents by NH, select states, and US

	NH		VT		ME		MA		US Total*	
	#	per 10,000	#	per 10,000	#	per 10,000	#	per 10,000	#	per 10,000
Psychiatrists										
Total	186	1.4	156	2.5	235	1.8	2082	3.2	38089	1.3
Patient Care	173	1.3	147	2.4	221	1.7	1887	2.9	35241	1.2
Office Based	132	1.0	110	1.8	166	1.3	1353	2.1	25846	0.9
Hospital Residents	22	0.2	21	0.3	15	0.1	266	0.4	4795	0.2
FT Hospital Staff	19	0.1	16	0.3	40	0.3	268	0.4	4600	0.2
Child Psychiatrists										
Total	32	0.9	20	1.3	53	2.3	318	1.9	6695	0.8
Patient Care	32	0.9	20	1.3	48	2.1	292	1.8	6195	0.8
Office Based	26	0.8	19	1.2	38	1.6	226	1.4	4927	0.6
Hospital Residents	4	0.1	0	0.0	2	0.1	34	0.2	608	0.1
FT Hospital Staff	2	0.1	1	0.1	8	0.3	32	0.2	660	0.1

*not including NH

Table A-2

Psychiatriy Workforce, MD's only per 10,000 residents by NH county

	Belknap	Carroll	Cheshire	Coos	Grafton	Hillsborough	Merrimack	Rockingham	Strafford	Sullivan
Psychiatrists										
Total	0.7	0.9	1.0	1.5	5.8	0.9	2.3	1.1	0.8	1.2
Patient Care	0.7	0.9	1.0	1.5	5.0	0.8	2.2	1.1	0.8	1.2
Office Based	0.5	0.9	0.8	1.2	2.9	0.7	1.9	0.9	0.8	0.2
Hospital Residents	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.9
FT Hospital Staff	0.2	0.0	0.3	0.3	0.1	0.1	0.3	0.2	0.0	0.0
Child Psychiatrists										
Total	1.39	0.0	1.5	0.0	2.4	0.5	1.1	1.3	0.3	1.0
Patient Care	1.39	0.0	1.5	0.0	2.4	0.5	1.1	1.3	0.3	1.0
Office Based	1.39	0.0	1.5	0.0	1.0	0.5	0.8	1.3	0.3	0.0
Hospital Residents	0.00	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	1.0
FT Hospital Staff	0.00	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0

Table A-3

Comparing Psychiatrists to other Specialties in NH vs surrounding states (in Patient Care) - 2004

	NH		VT		ME		MA		US Total*	
	#	per 10,000	#	per 10,000	#	per 10,000	#	per 10,000	#	per 10,000
Family Medicine	420	3.2	284	4.6	523	4.0	1,067	1.7	74,390	2.5
Pediatricians	222	1.7	159	2.6	202	1.5	1,871	2.9	52,027	1.8
Total	642	4.9	443	7.1	725	5.5	2938	4.6	126417	4.3

*not including NH

Mental Health Professional Shortage Area Criteria

In order to qualify for the designation of a mental health professional shortage area by the Health Resources and Services Administration, one of the following conditions must prevail within the area under review.[19]

A. The area has:
    1. A population-to-core-mental-health-professional ratio greater than or equal to 6,000:1 and a population-to-psychiatrist ratio greater than or equal to 20,000:1, or
    2. A population-to-core-professional ratio greater than or equal to 9,000:1, or
    3. A population-to-psychiatrist ratio greater than or equal to 30,000:1; or
B. The area has unusually high needs for mental health services, and has:
    1. A population-to-core-mental-health-professional ratio greater than or equal to 4,500:1 and a population-to-psychiatrist ratio greater than or equal to 15,000:1, or
    2. A population-to-core-professional ratio greater than or equal to 6,000:1, or
    3. A population-to-psychiatrist ratio greater than or equal to 20,000:1; or
C. Mental health professionals in contiguous areas are over utilized, excessively distant, or inaccessible to residents of the area under consideration.

[19] Health Resources and Services Administration. "Health Professional Shortage Area Mental Health Designation Criteria" Bureau of Health Professionals. Department of Health and Human Services. CFR 42(1.5-C). www.bhpr.hrsa.gov/shortage/hpsacritmental.htm. Accessed 28Aug2007.