North Dakota Residential Treatment Facility Capacity

October 2020

Introduction

This brief report addresses residential treatment capacity in North Dakota as an addendum to the March 2020 *North Dakota Hospital Study Final Report* from the Human Services Research Institute (HSRI). While recognizing that the focus of that report was inpatient treatment capacity, the Governor's office subsequently asked whether that project might provide the basis for additional consideration of residential treatment capacity without requiring additional data collection and analysis.

The question of residential treatment capacity was addressed to some extent in the *Hospital Study* report. The question was prompted by the fact that, each year, some number of children are placed in out-of-state facilities because no beds are available in the eight psychiatric residential treatment facilities (PRTFs). The conclusion of the hospital study was that this is a system issue rather than a lack of capacity. As stated in the final report, "The need is not for more capacity but rather for more appropriate and efficient use of that which exists" (p. 3). The following elaborates on that conclusion by reviewing some benchmarks for residential treatment capacity, by including adult facilities, and by considering treatment for mental health and substance use conditions.

Although there is no perfect methodology for determining the appropriate number of residential and inpatient beds in a given behavioral health system, based on the methodology described below, the conclusion of this review is essentially the same as that in the final report: the resources that would be required to expand this intensive, high-cost component of the service system would be better invested elsewhere in the continuum of care.

A Note on Assessing Need for Residential and Inpatient Beds

The challenge for determining the appropriate number of residential treatment beds in a behavioral health system is much the same as for inpatient beds: there is no standard formula—such as a per capita number—to guide decision-making. The considerable variation among publicly funded state, and even county, behavioral health systems makes a standard formula infeasible—and the need for any one type of service depends on the availability of other services along the entire continuum of care. For example, greater capacity of intensive outpatient treatment reduces the demand for residential services, and further upstream, effective prevention programs relieve pressure on treatment modalities of all types. Because behavioral health systems vary extensively in the capacity and effectiveness of these components, determining the appropriate capacity of any one component requires case-by-case needs assessments that address the entire continuum of care.

Instead of attempting to estimate need on the basis of a per capita formula, HSRI often uses a benchmarking approach, comparing the distribution of service types in a system with national ranges and averages. This is not to imply that a national average is an optimal standard; it simply provides policymakers with a framework for assessing the supply of a service.

This approach to determining appropriate capacity, which is the one used in the following analysis, may be refined in several ways:

- **Considering supply of a particular service in the context of the overall continuity of care**. Because resources are finite, and need always exceeds available resources,[1] decisions about supply must be made on the basis of relative allocation of resources across the continuum of care. If supply of a service such as residential treatment in a particular system exceeds the national average, the question for policymakers is whether this service is over-weighted relative to the system as a whole. Likewise, if the local supply is lower than the national average the question is whether there is adequate capacity. The answer in either case depends on the characteristics of the system as a whole. For example, the supply of residential treatment may be lower than the national average but nevertheless appropriate if the system maintains exceptionally robust outpatient services such as medication-assisted treatment (MAT) or case management.
- **Using prevalence data** (if available and sufficiently fine-grained) **to guide decisions about the relative need for treatment modalities**. For example, if the prevalence of opioid use is relatively high in an area, a greater allocation of resources to MAT programs may be called for; on the other hand, if alcohol use is more prevalent—as is the case in North Dakota as shown in the following analysis—then a need for relatively more programs and practitioners specializing in alcohol treatment is indicated.

[1] According to the SAMHSA National Survey on Drug Use and Health (NSDUH), in 2011-2015 the annual average of adults with any mental illness who received services was only 40.6% https://www.samhsa.gov/data/sites/default/files/NorthDakota_BHBarometer_Volume_4.pdf

Analysis

North Dakota and National Comparisons

The Substance Abuse and Mental Health Services Administration (SAMHSA) maintains two survey-based databases of treatment facilities: the National Mental Health Services Survey (N-MHSS)[2] and the National Survey of Substance Use Treatment Facilities (N-SSATS)[3]. Using information provided by the states, N-MHSS shares state profiles that include the number and characteristics of public and private mental health treatment facilities and the numbers of clients receiving treatment on a specific day. N-SSATS provides similar information about public and private facilities for alcohol and drug treatment.[4]

For North Dakota, the 2019 N-SSATS report identified 85 substance use treatment facilities of various types in the state; 28 of these were 24-hour residential facilities. In a single day (March 19, 2019) there was a total 3,754 clients in facility types combined. The 2018 N-MHSS report included 34 mental health treatment facilities; 10 of these were 24-hour residential programs. On a single day (April 30, 2018) there were 12, 209 clients in all facility types

Treatment for Substance Use: All Settings

N-SSATS provides some information about characteristics of clients receiving substance use treatment on a single day. On March 19, 2019 3,754 clients were receiving treatment in North Dakota's substance abuse facilities. Compared to the US as a whole, this is a higher per capita rate of treatment for substance use: 614 per 100,000 population compared to 529 per 100,000 for the US.

North Dakota differs from the US in the proportion of clients in treatment with drug abuse only, alcohol abuse use only, and both drug and alcohol abuse, with a lower proportion of clients with drug abuse and higher proportions with alcohol abuse and both drug and alcohol abuse (Table 1).

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[2] 2019 State Profile — United States and Other Jurisdictions National Mental Health Services Survey (N-MHSS): https://www.samhsa.gov/data/data-we-collect/n-mhss-national-mental-health-services-survey

[3] 2019 State Profile — United States and Other Jurisdictions National Survey of Substance Abuse Treatment Services (N-SSATS): https://www.samhsa.gov/data/data-we-collect/n-ssats-national-survey-substance-abuse-treatment-services

[4] N-SSATS and M-MHSS alternate years in which they collect information about number of people served; accordingly, this analysis refers to the 2019 N-SSATS and the 2018 N-MHSS to capture information about numbers served in both substance use and mental health residential programs.

Table 1. Clients in substance use treatment March 29, 2019

	ND		US	
	%	Per 100,000	%	Per 100,000
Clients with drug misuse only	39.3	249	52.2	280
Clients with alcohol misuse only	15.9	98	14.4	75
Clients with both alcohol and drug misuse	44.7	268	33.4	174
Total	100	614	100	529

This difference between North Dakota and the US in the relative proportion of clients receiving treatment for each of the two conditions (drug or alcohol use) could represent limited access to drug treatment in North Dakota, but a more likely explanation is differences between North Dakota and the US in prevalence rates for the two conditions. This explanation is supported by data from the SAMHSA National Survey of Drug Use and Health (NSDUH); as shown in Table 2 the prevalence of illicit drug use disorder in North Dakota is similar to that of the US, but prevalence of alcohol use disorder is considerably higher.

Table 2. Prevalence of drug and alcohol use disorder in North Daklota and US by percent of population age 12 and older.[5]

	ND	US
Illicit drug use disorder	2,76%	2.86%
Alcohol use disorder	6.54%	5.37%

Treatment for Substance Use: Residential Programs

In the 2019 single day count of clients in substance use treatment, of the total 3,754 clients, 321 (8.6%) were in residential treatment as opposed to outpatient and inpatient facilities. As shown in Table 3, the proportion of all clients who are in residential treatment is higher in North Dakota compared to the US average (5.7%), (and likewise for inpatient treatment as discussed in the *Hospital Study* report).

[5] https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf

Table 3. Single-day number of clients in substance abuse treatment by setting

	ND		US	
	Number	%	Number	%
Residential	321	8.6	91,592	6.3
Inpatient	75	2.0	14,090	1.0
Outpatient	3358	89.5	1,355,024	92.8
Total	3,754	100	1,460,706	100

Note: Percents may exceed 100 due to rounding

Another indicator of whether a particular treatment setting is over or under represented in a behavioral health system is the allocation of resources relative to other components of the system. Again, there is no formula for determining an appropriate allocation; however, benchmarking against national averages can identify a possible imbalance that calls for further investigation. The proportion of all substance use treatment facilities that are residential in North Dakota, nearly one-third of the total number of facilities, is higher than the national average, which is less than one-fourth.

Table 4 Type of setting by percent of all settings

	Facilities	
	ND	US
Residential	32.9%	23.8%
Inpatient	4.7%	5.6%
Outpatient	91.8%	81.7%

Note: Facilities may provide more than one type of care, so Facility totals exceed 100%.

Size and utilization of residential and inpatient substance use treatment facilities

North Dakota residential and inpatient facilities are smaller than the US average, but utilization rates are considerably lower. North Dakota's lower utilization rate is further evidence of an adequate supply of substance use residential treatment beds.

Table 5. Average number of beds and utilization rates, ND and US

	Average number of beds per facility		Utilization rate (%)	
	ND	US	ND	US
Residential	18	33	82.1%	94.8%
Hospital Inpatient	19	28	51.4%	87.1%

Private and public operation of substance use treatment facilities

State and local governments typically seek to maximize the availability of private facilities to reduce demand on state general funds. Accordingly, 90% of substance use treatment facilities in the nation are privately owned, whereas only about 6% are operated by state or local governments (with the remainder operated by federal and tribal governments). A consequence of this distribution is that the supply of behavioral health services is strongly affected by market forces, Where markets are not conducive to privately operated services, service availability is curtailed—unless state and local governments address the gap with general funds.

The proportion of facilities that are nonprofit in North Dakota is smaller than for the US, and the proportion that are for-profit is about the same; this suggests that North Dakota is in the mid-range of states in the extent to which market forces are conducive to privately operated supply. The proportion of facilities operated by state and tribal governments is higher in North Dakota, however, which suggests that the state and tribes are addressing at least some of the gap that would occur if the supply were dependent solely on market forces.

Table 6. Ownership by number and percent for ND substance use facilities, ownership by percent for US

	ND		US
	Number	%	%
Private nonprofit	23	27.1	50.4
Private for-profit	41	48.2	39.6
Local, county, or community government	2	2.4	4.3
State government	12	14.1	1.9
Federal government	1	1.2	2.1
Tribal government	6	7.1	1.6
Total	85	100.0	100.0

Residential Treatment for Mental Disorders

Compared to the N-SSAT, the N-MHSS provides less-detailed information about residential treatment. The information that is available, however, indicates that, as with substance use treatment, the proportion of North Dakota's mental health treatment facilities that are residential is higher than the national average. The 2018 N-MHSS identifies a total of 34 mental health facilities in North Dakota; 10 of these are residential programs, or approximately 30%. As with substance use residential facilities, this considerably exceeds the proportion nationally, which is only 16.5%. Yet, the percent of clients in all of North Dakota's mental health facilities that are in residential programs (1.3%) is similar to the national average (1.4%).

The utilization rate for mental health residential beds in North Dakota is 97.7%, slightly higher than the national rate of 94%, indicating that these programs are operating at full capacity.

One possible indicator of a need for more residential programs is excess utilization of *inpatient* treatment, which would suggest a lack of appropriate discharge options. The utilization rate for inpatient beds in the US is 118%—indicating that the number of mental health clients occupying beds exceeds the number of beds allotted for mental health treatment. For North Dakota, the utilization rate for inpatient beds is 87.7%—indicating operation at full capacity but not in excess of that. (Experts recommend a utilization rate in this range to allow for flexibility in planning admissions.)

Table 7. Type of mental health care by percent of all facilities and clients, ND and US 2018

	Facilities		Clients	
	ND	US	ND	US
Residential	29.4%	16.5%	1.3%	1.4%
Hospital Inpatient	20.6%	16.4%	2.3%	3.1%
Outpatient	82.4%	91.6%	96.4%	95.4%

Notes: Facilities may offer mental health treatment in more than one service setting; consequently, the number of facilities sums to more than the total, and percentages of facilities sum to more than 100. Percentages of clients may not sum to 100 due to rounding.
The proportion of clients in the respective treatment types was derived from a one-day count on April 30, 2018.
Outpatient care includes partial hospitalization, day treatment, and outpatient.

Conclusion & Recommendations

North Dakota's capacity for child and adult, and substance use and mental health, residential treatment is generally higher than national averages. In contrast to these data, however, there is a perception among some stakeholders, expressed in the interviews conducted for the hospital study, that capacity is inadequate. The reason for this perception, we believe, is not due to a shortage of beds but rather to inappropriate utilization—that is, beds occupied by people who could be served in less-intensive settings.

The reasons for inappropriate utilization may differ for child PRTFs and adult programs. As suggested in stakeholder interviews, inappropriate utilization of child residential programs is a result of inadequate utilization review and medical necessity determination, and possibly—as some have suggested—a reluctance on the part of providers to accept more challenging cases, such as those presenting with behavioral problems. The issue with adult use, however-- also discussed in the *Hospital Study* report--is that people remain in transitional housing longer than necessary, which is likely due mainly to a shortage of affordable housing. Longer stays occur because the alternative is homelessness. The evidence for these causes is only anecdotal; documentation would require case reviews, which was beyond the scope of the hospital study and this analysis. However, the number of key informants representing a variety of perspectives lends credibility.

The recommendations offered in the *Hospital Study Final Report*, therefore, hold for this analysis as well. There is little evidence to support investment in high-cost residential treatment when resources could be allocated elsewhere. Utilization review processes may be improved, and perhaps contract language regarding admissions could be revised to be more specific. Increasing housing options, especially affordable housing, should be a high priority.