Nevada Substance Abuse Prevention and Treatment Agency

Regional Capacity Assessment Report:

Rural Region

2019

Nevada Department of Health and Human Services

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

Contents

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Background and Introduction

Substance Abuse Prevention and Treatment Agency

This report was commissioned by Nevada's Substance Abuse Prevention and Treatment Agency (SAPTA), which is part of the Bureau of Behavioral Health, Wellness and Prevention (BBHWP) within the Division of Public and Behavioral Health (DPBH). SAPTA plans, funds, and coordinates Nevada's statewide substance use disorder service delivery system, which is the primary focus of this regional capacity assessment effort[1]. SAPTA's key roles include distributing funding (tax dollars, general fund, and grants), creating and implementing statewide plans for substance use disorder services, and developing standards for certification of programs and services.

In 2017, SAPTA updated its strategic plan with a focus on promoting healthy behaviors and reducing the impact of substance use and co-occurring disorders for Nevada's residents and communities. The following vision and the U.S. Substance Abuse and Mental Health Services Administration's (SAMHSA) core concepts were adopted in the plan.

Vision

Nevadans are healthy and resilient and able to fully participate in their communities

SAMHSA's Core Concepts

Behavioral health is essential to health.

- Prevention works.
- Treatment is effective.
- People recover from mental and substance use disorders.

The goals outlined in the strategic plan include:

[1] SAMHSA defines **behavioral health** as "a term used to refer to both mental health and substance use" (www.integration.samhsa.gov/glossary). For this report, behavioral health is primarily used to refer to substance use rather than mental health, as the scope of the capacity assessment was limited to the SUD service system.

To effectively implement the strategic plan, Nevada's substance use disorder (SUD) prevention and treatment service system must have sufficient capacity to meet identified needs. The Rural Region Regional Behavioral Health (RBH) Policy Board oversees behavioral health planning and resource development for the region. Created by the 2017 Nevada Legislature, the RBH Policy Boards (Northern, Washoe, Rural and Southern regions) consist of 13 members each and, in accordance with NRS 433.4295, advise DBPH on matters pertaining to behavioral health issues, promote improvements in the delivery of behavioral health services, coordinate with other regional policy boards and submit a report to the Commission on Behavioral Health.[2]

Figure 1: SAMHSA Strategic Prevention Framework (SPF)

SAMHSA's Strategic Prevention Framework (SPF)[3] is one tool that RBH Policy Boards can utilize as a resource to guide their efforts. The SPF is a planning process for preventing substance misuse. The five steps (assessing needs, building capacity, planning, implementing and evaluating the plan's implementation) and two guiding principles (sustainability and cultural competence) of the SPF offer prevention professionals a comprehensive process for addressing the substance misuse and related behavioral health problems facing their communities. The SPF begins with establishing a clear understanding of community needs and involves community members in all stages of the planning process. CAST requires that communities assess needs using data to drive identification of capacity building priorities. This report is designed to address Steps 1 and 2, *Assess Needs* and *Build Capacity*.

In order to assess community needs, public data was collected by region. Additional documents informed the report and provide context for the regional system and its capacity. They include:

- Regional Behavioral Health Policy Board Minutes 2018-2019
- 2018 Rural Regional Behavioral Health Report
- Presentation: Rural Children's Mental Health Consortium Annual Progress Report for Ten Year Strategic Plan 2018
- SAPTA Provider List
- SAPTA Needs Assessment 2018

Purpose of Report

The purpose of the Rural Region[4] Capacity Assessment Report is to help SAPTA understand:

- SUD prevention and treatment service system resources, unmet need and hospitalization risk for SUDs specific to the Rural Region.

[2] Retrieved on May 28, 2019 from http://dpbh.nv.gov/Boards/BoardsCouncils2/
[3] Retrieved on March 31, 2019 from https://www.samhsa.gov/capt/applying-strategic-prevention-framework
[4] At the time of creation of this report, the Rural Region is comprised of Elko, Eureka, Humboldt, Lander, Lincoln, Pershing, and White Pine counties.

- Capacity building priorities in the Rural Region.
- The scope and location of existing SUD prevention and treatment services in the Rural Region, Nevada.

Approach

In 2019, as part of an effort to understand current statewide and regional capacity for SUD prevention and treatment services and establish priorities to build future capacity, SAPTA conducted a system-wide assessment using the Calculating an Adequate System Tool (CAST). Social Entrepreneurs, Inc. (SEI) was engaged by the state to facilitate completion of CAST at the regional level, in collaboration with Nevada's Regional Behavioral Health Coordinators (RBHCs).

CAST was developed by an interdisciplinary group of researchers at SAMHSA's Center for Behavioral Health Statistics and Quality (CBHSQ) in 2016. Since this publication, CAST has been updated, and a manual[5] was recently developed which describes the purpose of CAST as follows:

> "CAST was created as a method for evaluating the capacity of the substance abuse care system within a defined geographic area. CAST provides users with both a risk assessment of county-level social and community determinants of substance abuse, and an assessment of local service need across the continuum of care […] CAST uses social determinants of behavioral health and social disparities in behavioral health outcomes to provide insight into the chronic social conditions that may be contributing to behavioral health outcomes in your community. Most often, CAST has been used to estimate need for a county as the geographic unit, but it can be used for smaller or larger areas, as long as data at those geographic levels is available or could be produced at that scale." (p. 3)

The CAST Model

The first iteration of CAST was a proof of concept that was tested in two pilot regions (Chicago and Newaygo County MI), leading to the publication of an article in Preventing Chronic Disease. There were two basic goals built into the CAST model, which were to:

- Quantitatively assess the relative risk that a population had for adverse outcomes related to alcohol or drug use.
- Provide a mathematical method for comparing the observed totals of the substance misuse care continuum components that existed within a community to research informed estimate of need for that community.

[5] Green, B., Lyerla, R., Stroup, D., & Jones, K. (n.d.). *(CAST) Manual: Calculating an Adequate System Tool.* Retrieved January 1, 2019, from http://jgresearch.org/wp-content/uploads/2018/06/cast-handbook-development-jg-research-evaluation-v1.pdf

By providing two distinctive community assessment methodologies, CAST provides information to community leaders about both the people who live in their place and the composition of their SUD care system. When taken together, these elements help to define the demand, need, and current service capacity of a community behavioral health care system related to SUD prevention, intervention and treatment. The two complimentary assessments that inform the CAST are the Risk Score and the Community Capacity Calculator. Both are described further in the CAST Results section.

CAST was used to generate estimates of need that can help to inform community or organizational planning efforts in Nevada. RBHCs were asked to assist by:

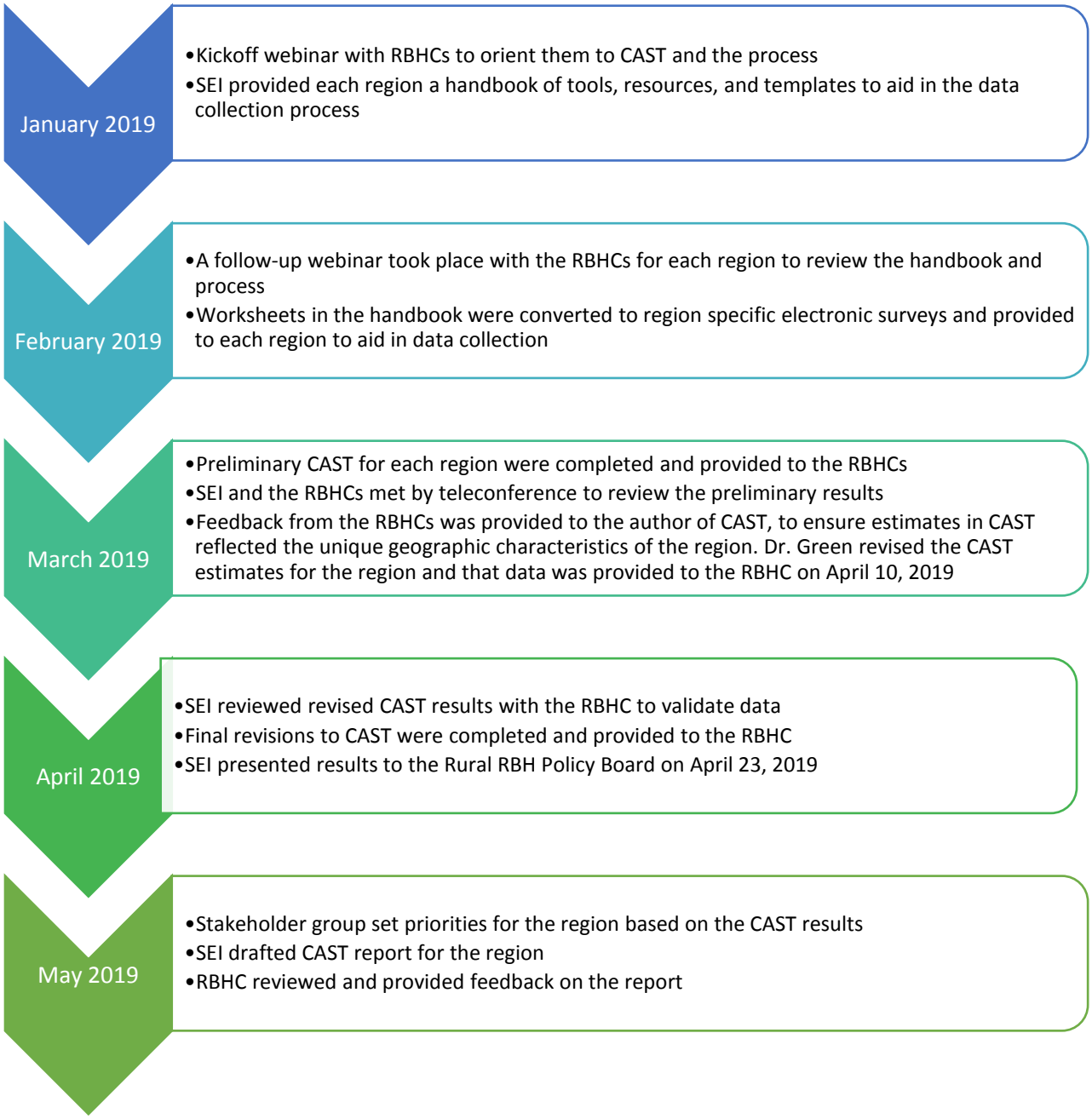
- Identifying and convening community stakeholders
- Assisting in data collection of local assets and resources
- Reviewing data collected by SEI
- Validating data
- Facilitating community meetings with SEI support to solicit information from community stakeholders
- Reviewing and providing input on the Regional CAST summary for their region

A handbook was developed and provided to the RBHCs to assist in the collection of specific data to produce estimates of local service capacity and need. This handbook included:

- An overview of the data required for CAST and an overview of the data collection approach
- Tools to assist in each step of the data collection approach, including:
  - Outlines of the process, timing, and responsibilities
  - Guidance, suggestions, and tips
  - Templates for communication and data collection
  - Handouts and worksheets
  - Assessment component definitions and units of measure for reference

Timeline

To populate the CAST for the Rural Region, both primary (publicly available) and secondary (regionally available) data was collected. Independent research was conducted in the first quarter of 2019. SEI contacted regional resources and worked with the RBHC to compile data and seek information through publicly available sources. The following is a timeline of activities:



SEI worked in partnership with the RBHCs, their policy boards and other community stakeholders in each region to ensure efficient and accurate data collection.[6]

[6] For more information about the technical calculations, processes, and methods of producing CAST, please refer to the CAST Manual published in 2018.

Limitations and Assumptions

1. Regional characteristics are based on social determinants of health for the whole population of a region and are not limited to low-income or Medicaid populations.

2. Data collected about resources change regularly. The data depicts the system at a particular point in time and serves as a baseline for the region. It is likely that over time resources will differ from those described in CAST and depicted in maps which were generated in April 2019.

3. The numerical estimates are intended to provide a succinct and universal understanding of the care system. This is a view that is missing from assessment methodologies that utilize public surveys and focus groups, hence the value. Assessment using the CAST method occurs within a complex social environment of varied priorities and perspectives. The numbers were used to help facilitate conversation in a way that can be more precise and more informed.

4. Numeric estimates indicate the quantity of services at a point in time of the project (April 2019). However, an assessment of the quality of the services counted was not included in the scope of this report.

5. CAST is limited by the availability of high-quality data about each component of the care system. Users should be careful to document their sources and use those same sources for second or third waves of assessment.

6. CAST is limited by the generalness of the terms used for each component. For example, “school-based prevention programs” can vary widely depending on the evidence-based approach selected and/or the population of focus that is being addressed. Adjustments to usage rates and population totals can address much of this variation, but there is still a level of estimation and error in this approach, since very precise differences between programs will be overlooked and replaced with place-informed estimates of populations receiving services and program delivery methods.

7. CAST is limited by the nature of population-level surveillance of alcohol and drug use in the United States. The National Survey on Drug Use and Health (NSDUH) is the standard method for estimating use prevalence, but this survey, updated annually, provides state-level data only. This means that county and regional-level estimates must be extrapolated from NSDUH state-level prevalence estimates. Many counties and regions are anecdotally different from their state average. This has the effect of minimizing differences among counties or regions with high use rates or very low use rates.

8. Risk modeling for CAST was undertaken at the county-level. Analysis that attempts to aggregate totals across a region, as was done during this project, will likely lose some variation.

Capacity Assessment Results

This section presents a high-level summary of Rural Region's SUD prevention and treatment system capacity, using the assessment categories as outlined in CAST.

Overview of CAST Assessment Categories

Assessment Categories:

- Promotion
- Prevention
- Referral
- Treatment
- Recovery

These five categories encompass 29 components of a behavioral health care system.

Components of the system that CAST helped to assess include:

Promotion	•Behavioral health promotion efforts are intended to raise awareness about specific substance use concerns, provide universal outreach to your community, and facilitate the intentional coordination of population health promotion efforts by community coalitions.
Prevention	•Prevention programs are early-intervention strategies intended to reduce the impact of substance use disorders. Prevention programs are organized around the three population defining strategies of Universal, Selective, and Indicated programs.
Referral	•The referral system as defined in CAST is one that links individuals to treatment, be it voluntarily or involuntarily.
Treatment	•Treatment service types vary widely, and CAST does not offer tools for assessing the quality of care provided within a community. The use of CAST is intended to provide insight about the amount of treatment access and type of treatment access that members of the community are being offered.
Recovery	•Knowing the nature of your community recovery support network can help to understand how and if resources may need to be allocated to supporting those in recovery, thereby reducing risk of relapse.

CAST Regional Risk Score and Community Characteristics

The Risk Score uses a social determinants of behavioral health framework and operationalizes this framework at the regional level by calculating the risk contribution of the region's social determinants of health and health disparities to the likelihood that the region's hospitalization rate for SUDs will be above the national median hospitalization rate for SUDs[7]. CAST has a section that is color-coded in green, yellow, and red to provide a visual benchmark to users about a county's or region's general risk level as compared to other counties across the United States for hospitalization due to SUDs. There are three risk levels[8]:

a. Low risk (green) – The aggregated and calculated risk score for a community is equal to or lower than the national median for hospitalization due to drug/alcohol diagnosis.

b. Medium risk (yellow) – The aggregated and calculated risk score for a community is between 0-25% above that of the national median for hospitalization due to drug/alcohol diagnosis.

c. High risk (red) – The aggregated and calculated risk score for a community is more than 25% above that of the national median for hospitalization due to drug/alcohol diagnosis.

Rural Region's Risk Level

Table 1. Rural Region Risk Level of Hospitalization for Drug or Alcohol Related Cause

County Risk Level Risk of Hospitalization for Drug or Alcohol Related Cause Level	
Total Risk Score	15

CAST uses a regressive analysis of social determinants of health informed by national data and research on factors that increase the likelihood for a county or region to have higher than the national median for hospitalization due to SUDs. The characteristics for CAST based on Rural Region data are detailed as follows.

[7] Table 7 (p. 52) in the appendix to the CAST manual displays the percent likelihood that the social determinants of risk present in the population will produce a hospitalization rate due to SUDs that is higher than the national median.
[8] Refer to the CAST Manual for more details.

Table 2. Social Determinants of Health in the Rural Region

County Characteristics	Data Entry	Risk Contribution
Total Population	98,802	
% of adult population that is male	53.77	1
% of population that is non-white	12.64	0
% of county that is rural	48.04	0
High school dropout rate	12.45	0
Veteran population	6.86	0
% of households with income below $35,000	28.17	0
% of population with a college degree	16.65	0
% of population that is widowed or divorced	19.2	0
% of the population that is uninsured	11.28	0
Association rate per 100,000 people	44.59	3
Region designated as a high incidence drug trafficking area	0	0
Alcohol outlet density rate per 100 non-alcohol businesses	4.25	9
Violent crime rate per 100,000 people	423	2
% of population with access to physical activity	43	0
% of the population that is age 18 or below	26	0

CAST additionally estimates regional usage rates for the five most commonly misused substances according to the NSDUH.

Table 3. Estimated Usage Rates for Most Commonly Misused Substances in Rural Region

Total Population of Rural Region 98,802	**Usage rates**	**Total Estimated # of users in region**	**Total estimated # of users in region with use disorders**	**Estimated # of users in region who will receive treatment**	**Estimated # of users in region needing but not receiving treatment in past year**
Alcohol	17.1%	16,875	5,592	494	5,162
Marijuana	16.8%	16,599	3,438	73	2,806
Cocaine	2.3%	2,272	2,272	55	1,850
Opioid Misuse (Heroin and opioid pain relievers)	4.4%	4,347	4,347	70	3,539
Pain Reliever and prescription psychotherapeutics	6.9%	6,817	682	117	555
Totals		41,751	12,561	809	10,615

Regional Capacity Calculator Output

The CAST Community Capacity Calculator uses algorithms to estimate the numerical totals for core components of the SUD prevention and treatment continuum in a region. Each estimate is based upon a population total, a frequency of service utilization, and a group size who receives one unit of service. When the estimate is compared to observed totals, a rating is given for each component if it is calculated to be above or below the minimal level needed to provide care to community members most likely to use that component. It should be emphasized that this calculation reflects a *minimal level of care*, and communities may decide to prioritize specific populations or types of interventions. In multiple locations, it has been observed that even when the CAST assessment suggests a particular component is in adequate supply, community stakeholders will articulate clear reasons why they may want a program to serve a broader population group within their community than the minimum level of need indicated by CAST.

The following is a snapshot of the capacity results for Rural Region. Items in green indicate sufficient capacity within the region for that service component. Conversely, items in red indicate an unmet need for that component in the region. Unmet needs vary by item and detailed information for each item is found in the following section.

Table 4. Rural Region Capacity Need Snapshot by CAST Category

Promotion	Prevention	Referral	Inpatient Treatment	Outpatient Treatment	Recovery Support
Marketing Advertisements	School-based prevention programs	Adult Specialty Courts	Detoxification	Detoxification	Religious or spiritual advisors
Media Advocacy Events	Community-based prevention programs	Youth Specialty Courts	24-hour/Intensive Day treatment	Counselors	12-step groups
Community Coalitions	Housing Vouchers for low-income residents	Social Workers	Short-term (30 days or fewer)	Psychiatrists	Transportation for those receiving treatment
	Needle Exchange		Long-term (more than 30 days)	Psychologists	Employment support for those receiving treatment
	Prescription Drug Disposal Events/Locations			Opioid Treatment Program (OTP)	Educational support
				Office Based Opiate Substitution (OBOT)	Parenting education
					Housing assistance
					Insurance assistance

Community Data

Using the five CAST categories to define the SUD continuum of care, data on regional resources was collected from publicly available sources as well as from community partners via input from the RBH Policy Board community workgroup members, and targeted surveys of community providers and stakeholders (e.g. law enforcement, coalitions, faith-based

organizations). Adjustments to estimated need were made by the tool's lead author, Dr. Green, based on information provided by the Rural RBHC.

The maps that follow each table illustrate the resources available to assist with the management of substance misuse in the Rural Region. These resources are organized in accordance with the categories utilized by CAST to facilitate continuity within this report. Note that where appropriate, some categories have been combined into one map or further split out by subcategories.

Also available at https://urlzs.com/5U97P is an interactive, web-based map that community members, stakeholders, and government agencies may embed on their websites or share with clients. This map summarizes the SUD resources available across Nevada and gives a holistic, geographic snapshot of the promotion, prevention, referral, treatment, and recovery efforts taking place within Nevada. Upon completion of this report control of the map will be given to the RBHCs, who can collectively coordinate efforts to manage updating, sharing, and usage of the map.

Promotion

Behavioral health promotion efforts are intended to raise awareness about specific substance use concerns, provide universal outreach to your community, and facilitate the intentional coordination of population health promotion efforts by community coalitions. Collecting data about these types of efforts is one of the more difficult data collection tasks in CAST. It is difficult because the scope of activities is broad and can be undertaken by a diverse set of stakeholders.[9]

Data regarding promotional activities was derived from stakeholder surveys. Even with limited responses to the surveys, due to the project's timeframe, CAST calculates sufficient capacity in two of the three components in this category, therefore promotion was not selected as a priority for the region.

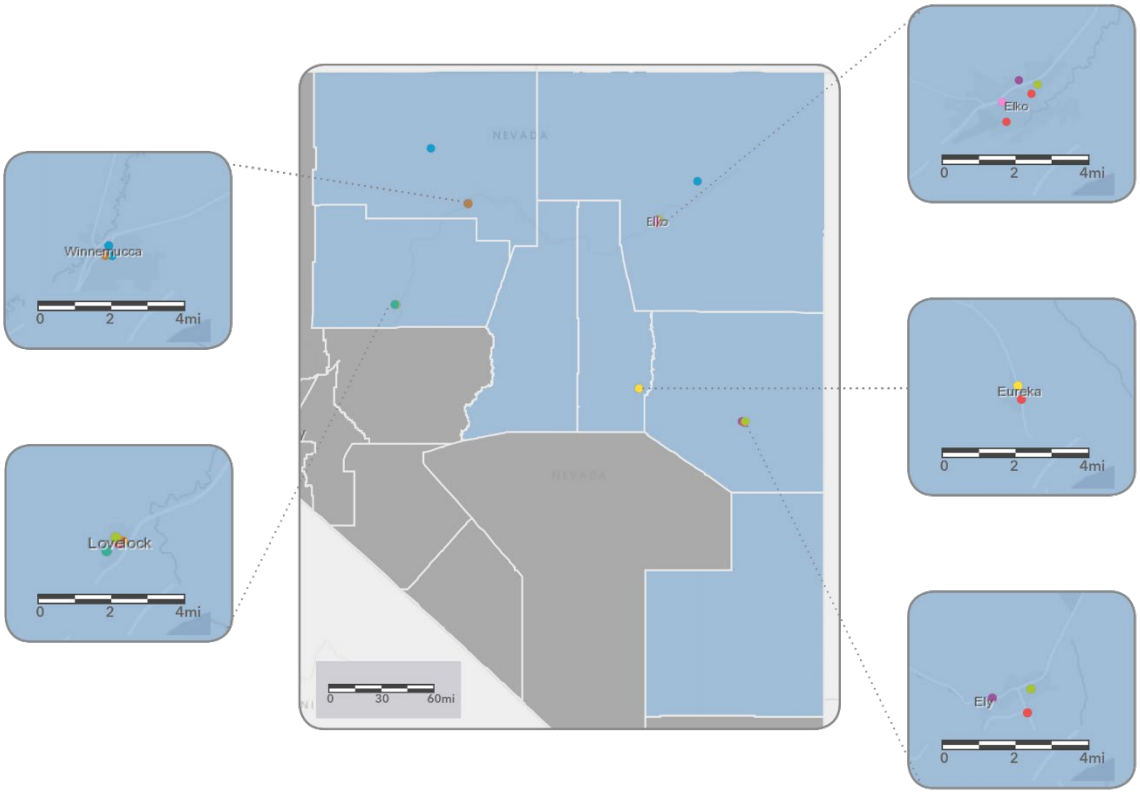
Table 5. Promotion Capacity Calculator Results, Rural Region

Components	Definition and Units of Measurement	Maximum Community Need	Program Usage Rate	Adjusted Community Need	Observed Community Totals	Estimated Need
Promotion						
Marketing Advertisements	Individual advertisements placed on tv, radio, print, billboards, web, and social media within a year.	593	*85%*	503.89	663	159
Media Advocacy Events	Individual, in-person gatherings meant to raise awareness of substance misuse.	395	*3%*	11.86	10	-2
Community Coalitions	Individual coalitions of political, non-profit, and/or business organizations that receive and allocate grant funding to limit substance misuse.	3	*7%*	0.20	4	4

[9] Excerpt from the CAST Manual.

Promotion and prevention resources have been combined on the following map, as many organizations provide both types of support. The capacity calculator results for prevention services are found on the page 14 in Table 6.

Map 1. Promotion and Prevention Providers in the Rural Region



Each dot represents an organization that provides or facilitates either:

Note that these dots represent the business address of one organization or service provider. Prevention and promotion activities facilitated by these organizations take place throughout the Frontier region.

- Advertisements
- Housing vouchers
- Advertisements and advocacy events
- Advertisements, advocacy events, and community coalition
- Community coalitions
- Prescription drug disposal
- Advertisements and prescription drug disposal
- School-based prevention programs and prescription drug disposal
- Community-based prevention programs
- School-based prevention programs

Note that these dots represent the business address of one organization or service provider. Prevention and promotion activities facilitated by these organizations take place throughout the Rural Region.

Prevention

This category encompasses early-intervention strategies intended to prevent the onset and mitigate the impact of SUDs on individuals and communities. Prevention activities are organized around the three population-defining strategies of Universal, Selective, and Indicated programs.

- **Universal** programs include environmental prevention strategies and programs which aim to provide information to all individuals.

- **Selective** programs target subgroups of the community that are known to be at increased risk to engage in substance misuse.
- **Indicated** programs are intended for individuals who have demonstrated early signs of substance use problems.[10]

More and more, systems trying to address social determinants of health have identified the role that housing plays in prevention and recovery with the acceptance that housing is healthcare. The lack of housing vouchers in the Rural Region is a capacity need, but the need is even greater for those in recovery or coming out of recovery. Recovery is challenging when housing isn't available. The region has determined housing is a priority under the recovery category.

Table 6. Prevention Capacity Calculator Results, Rural Region

Components	Definition and Units of Measurement	Maximum Community Need	Program Usage Rate	Adjusted Community Need	Observed Community Totals	Estimated Need
Prevention						
School-based prevention programs	SUD prevention programs being implemented within schools.	21	*93%*	19.27	6	-13
Community-based prevention programs	SUD prevention programs being implemented within community settings.	198	*12%*	24.50	9	-16
Housing Vouchers for homeless residents	Dedicated beds for homeless, across all types of homeless Continuum of Care (CoC) project types.	1,739	*20%*	347.78	92	-256
Needle Exchange	Number of locations offering needle exchange.	2	*45%*	0.80	0	-1
Prescription Drug Disposal Events/Locations	Number of drug disposal events held per year, combined with all drug disposal locations.	5	*60%*	2.88	10	7

Referral

Knowing how individuals are accessing or being directed to SUD services can assist the RBH Policy Board as it develops an integrated system of behavioral health care for the region. The referral system as defined in CAST is one that links individuals to treatment, be it voluntarily or involuntarily.

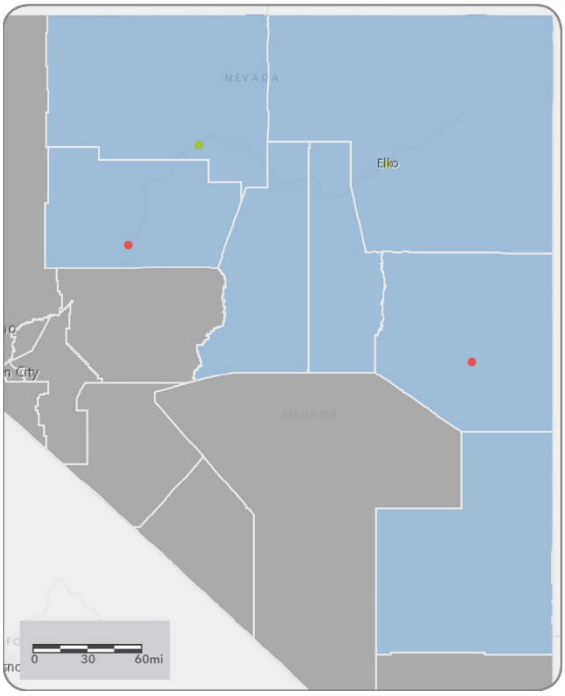
When compared to other components of the system, the referral system in the Rural Region has sufficient capacity in two of the three components. With an adequate referral system, it is critical to have sufficient resources to refer individuals to and transportation available to facilitate access to treatment when they request services. As the treatment and recovery capacity elements that follow indicate insufficient capacity and higher unmet need, this category is not a top priority for capacity building at this time.

[10] Excerpt from the CAST Manual.

Table 7. Referral Capacity Calculator Results, Rural Region

Components	Definition and Units of Measurement	Maximum Community Need	Program Usage Rate	Adjusted Community Need	Observed Community Totals	Estimated Need
Referral						
Adult Specialty Court	All specialty courts that serve adults.	60	*1%*	0.60	4	3
Youth Specialty Court	All specialty courts that serve youth.	21	*1%*	0.21	4	4
Social Workers	Licensed social workers with a substance use or mental health focus (includes part-time social workers)	81	*87%*	70.42	0	-70

Map 2. Referral Providers in the Rural Region



Each dot represents the location of:

Specialty Courts (Adult only)** Specialty Courts (Adult and youth)**

***Note multiple specialty courts may operate from the same location or building. There are a total of 4 adult and 4 youth specialty courts within the Rural Region.*

Treatment

To support an effective and responsive referral system, it is critical to have an adequate and accessible supply of SUD treatment resources to refer individuals to when they request or are identified as needing services. Treatment service levels and types vary widely, and the use of CAST is intended to provide communities with insight about the primary inpatient and outpatient components of treatment to better understand the array of treatment options available in Rural Region. It is important to note that CAST does not assess the quality of care being provided within the region.

Inpatient/Residential Treatment[11]

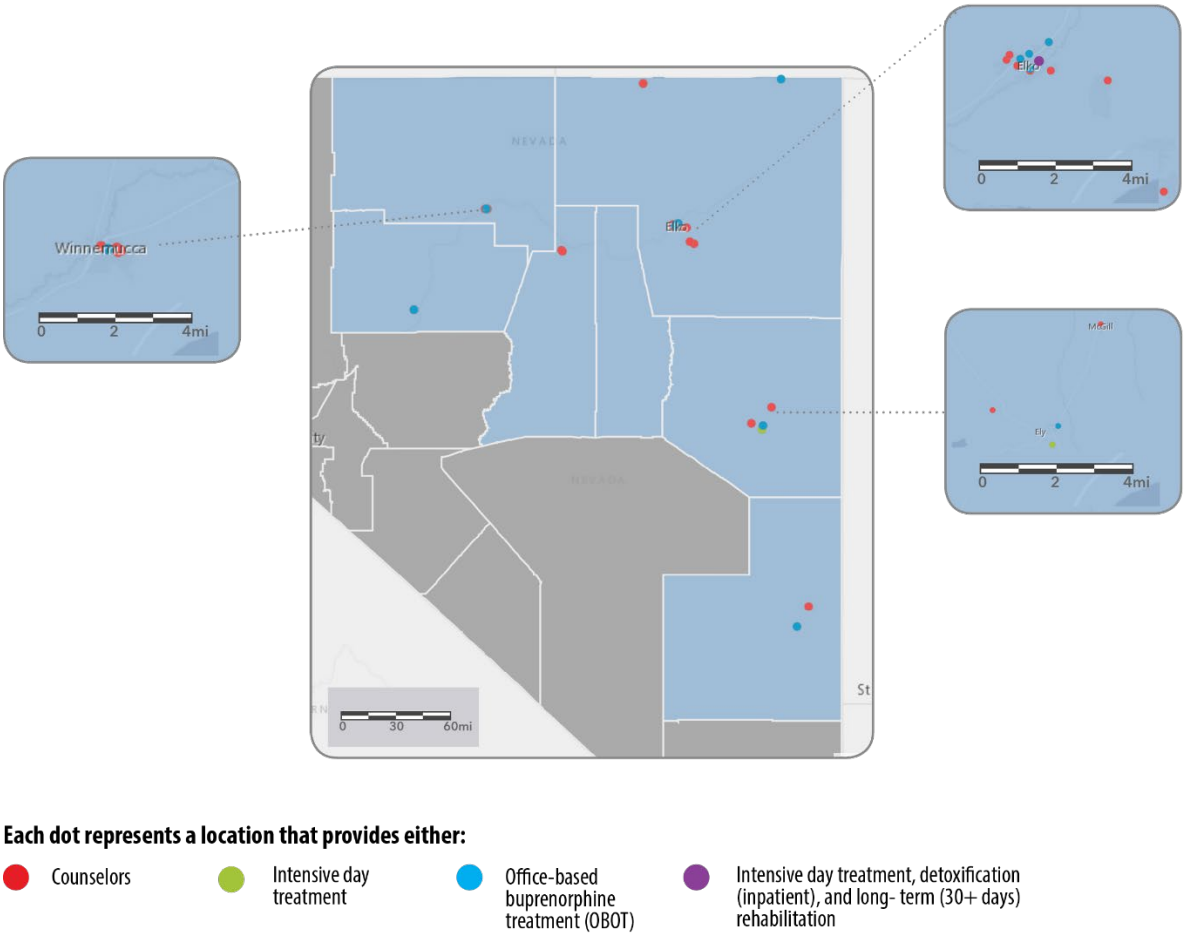
There are very few inpatient treatment providers in the Rural Region. While the region recognizes inpatient treatment as an important resource for people with substance use disorders, it was not chosen as a priority given that the communities within the region are so sparsely populated it is not likely they would ever have this type of intensive treatment available within even a minority of the communities in the Rural Region. Therefore, growing capacity for outpatient treatment was selected as a priority for the region.

Table 8. Inpatient Treatment Capacity Calculator Results, Rural Region

Components	Definition and Units of Measurement	Maximum Community Need	Program Usage Rate	Adjusted Community Need	Observed Community Totals	Estimated Need
Inpatient						
Detoxification	Facilities providing in hospital or residential detoxification.	2	*13%*	0.25	1	1
24-hour/Intensive Day treatment	Facilities providing non-residential, psychiatric care programs, lasting two or more hours per day for 3 or more days per week.	21	*8%*	1.68	2	0
Short-term (30 days or fewer)	Facilities providing less than 30 days of non-acute care in a setting with SUD treatment services .	38	*5%*	1.90	0	-2
Long-term (more than 30 days)	Facilities providing 30 days or more of non-acute care in a setting with SUD treatment services.	32	*6%*	1.90	1	-1

[11] Note that the CAST places Intensive Day Treatment under "Inpatient Treatment". That component has been moved to the Outpatient map section of the other regional reports to better match the definition of the service. However, due to the scarcity of treatment resources within the Rural Region, all treatment providers have been combined on one map.

Map 3. Treatment Providers in the Rural Region



Outpatient Treatment

Ensuring outpatient treatment availability is a capacity priority for the Rural Region. Many of the counties that make up the Rural Region are designated as "frontier counties," rather than just rural. This means that they are geographically isolated from services and population centers that are more likely to have services. This creates barriers to recovery across almost all of the communities within the region and drives the need for more transportation services.

Stakeholders in the region see opportunities to leverage technology to meet the needs of residents without requiring them to travel long distances. For example, appointments for office-based opiate substitution can be relatively short, however, in remote areas, getting to a 15-minute appointment can take all day. The shortage of providers throughout Nevada, particularly in frontier communities, makes technology-facilitated outpatient treatment especially important.

However, there will still be resources that can only be accessed in more populated areas and for that reason, the Rural Region has prioritized transportation, under the recovery component

of the system of care, above other components. If left unmet, the lack of these services could result in higher hospitalization rates for substance misuse in these communities, many of which lack hospitals.

Treatment providers that can address both mental health and substance misuse are needed throughout the Rural Region. According to research cited by the National Institute on Drug Abuse, about half of people who experience a mental illness will also experience a substance use disorder at some point in their lives and vice versa.[12] With the challenges rural and frontier community members face when accessing treatment, both issues must be addressed by providers and treatment facilities in order to reintegrate people back into the community or allow them to remain in the community while going through treatment.

Table 9. Outpatient Treatment Capacity Calculator Results, Rural Region

Components	Definition and Units of Measurement	Maximum Community Need	Program Usage Rate	Adjusted Community Need	Observed Community Totals	Estimated Need
Outpatient						
Detoxification	Facilities providing outpatient/ambulatory detoxification.	2	*13%*	0.27	0	0
Counselors	Counselors licensed by the state to assist clients with drug and alcohol issues.	94	*35%*	33.01	23	-10
Psychiatrists	Psychiatrists listed as specializing in SUD issues.	66	*27%*	17.74	0	-18
Psychologists	Psychologists listed as specializing in SUD issues.	66	*4%*	2.63	0	-3
Opioid Treatment program (OTP)	Providers that offer opioid treatment programs (OTPs), with daily supervised dosing.	8	*25%*	2.07	0	-2
Office based opiate substitution (OBOT)	Providers that offer office-based opioid treatment (OBOT), which provides medication on a prescribed weekly or monthly basis (is limited to buprenorphine).	116	*25%*	29.01	11	-18

Recovery Support

Relapse among those who have received treatment is a major concern for regional SUD care systems. Knowing the nature of Rural Region's recovery support network can help the RBH Policy Board to understand where resources may need to be allocated to strengthen the support system for those in or seeking recovery, thereby reducing risk of relapse and bolstering long-term health outcomes.

[12] Ross S, Peselow E. Co-occurring psychotic and addictive disorders: neurobiology and diagnosis. *Clin Neuropharmacol.* Retrieved May 20, 2019 from: https://www.drugabuse.gov/publications/drugfacts/comorbidity-substance-use-disorders-other-mental-illnesses#ref

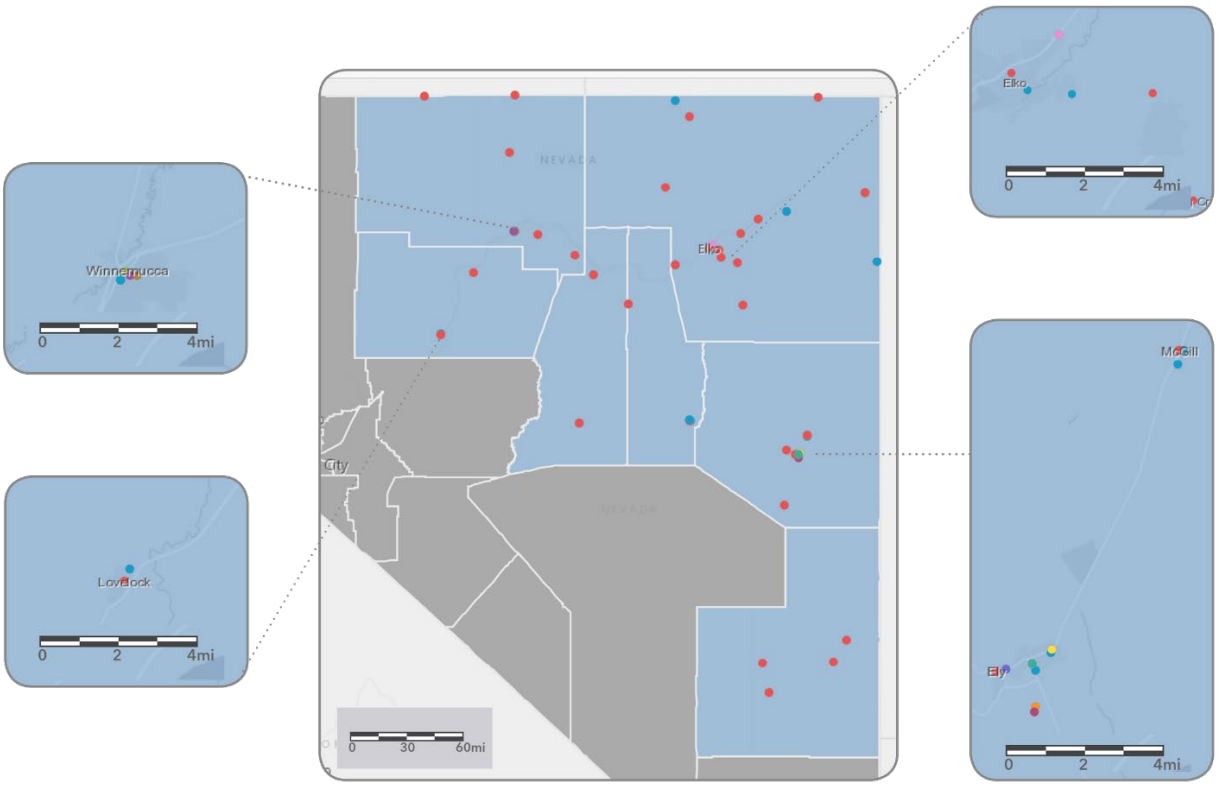
Relapse is also more likely when stable and affordable housing is limited. While the data collection for CAST identified two resources within the Region, which approaches the need estimated by CAST, these facilities have exclusionary criteria or are set up to serve one segment of the substance abusing population. This means that there is very little, and in some counties no, housing support for individuals in recovery.

For the reasons discussed above, transportation, was selected as the overarching priority for the region. If people can't get to treatment they are unlikely to benefit from the other resources within the recovery component. All of the unmet needs identified by CAST are compounded by the lack of transportation.

Table 10. Recovery Support Capacity Calculator Results, Rural Region

Components	Definition and Units of Measurement	Maximum Community Need	Program Usage Rate	Adjusted Community Need	Observed Community Totals	Estimated Need
Recovery Support						
Religious or spiritual advisors	Individual, religious or spiritual professionals providing SUD therapy and counseling.	286	*11%*	31.42	0	-31
12-step groups	Number of SUD support groups offered weekly.	78	*30%*	23.35	23	0
Transportation for those receiving treatment	Number of vouchers provided within a year to assist those seeking treatment.	20235	*14%*	2832.85	38	-2795
Employment support for those receiving treatment	Number of programs offered by each responding or reported group (number not specified counted as 1).	126	*5%*	6.85	3	-4
Educational support for those who have completed treatment	Number of programs offered by each responding group (number not specified counted as 1).	18	*14%*	2.52	3	0
Parenting education for individuals with a use disorder	Number of programs offered by each responding group (number not specified counted as 1).	50	*7%*	3.27	52	49
Housing Assistance	Number of programs offered by each responding group (number not specified counted as 1).	30	*7%*	2.11	2	0
Insurance Assistance	Individual professionals who provide insurance enrollment support.	39	*43%*	16.98	3	-14

Map 4. Recovery Support Providers in the Rural Region



Each dot represents an organization that provides or facilitates either:

Note that these dots represent the business address of one organization or service provider that offers support that can help individuals recovering from substance abuse; each organization may provide multiple classes or vouchers.

- 12-step programs
- Assistance obtaining health insurance
- Assistance obtaining housing
- Assistance obtaining transportation
- Educational support programs
- Employment support programs
- Parenting education
- 12-step programs, and educational support programs
- Assistance obtaining housing, and parenting education
- Assistance obtaining transportation, and employment support programs
- 12-step programs, assistance obtaining transportation and insurance, employment support programs, and parenting education

While there are additional areas of unmet need in the recovery support category, ensuring sufficient housing and increasing access to treatment through the availability of additional transportation services were seen as higher priorities for the region. This is not to diminish the importance of other components that have unmet needs in the region. Rather, it is to be strategic and systematic in using data to set priorities.

Priorities for Action

Following a review and discussion of Rural Region's CAST results, including an analysis of the region's social characteristics, risk score and unmet need analysis in the context of planning efforts already underway, the following priorities were established by a stakeholder group convened on May 14, 2019. The priorities for the Rural Region relate to building regional

behavioral health capacity to meet community needs for SUD services. In keeping with principles of effective planning, priorities were limited to five per region to ensure that efforts won't be diffused by focusing on too many areas at one time. As progress is made on the following priorities, other areas of unmet need identified by CAST can be revisited.

The top four (ranked) priorities for the Rural Region are:

Recovery: Transportation

- Increase the availability of transportation services.

Recovery: Housing Support

- Increase the number of housing available to support people in recovery.

Treatment: Outpatient

- Increase the availability of outpatient treatment by leveraging technology.

Treatment: Outpatient Treatment for Co-Occuring Disorders

- Increase the availability of outpatient treatment for co-occurring disorders.

These priorities will be shared with the State of Nevada and included in a comprehensive report that includes the priorities for each region of the state. The report will identify areas of commonality across regions as well as regional differences in priorities.

Appendix A: Notes from the CAST Tool Developer

Utilization

CAST was designed to be used in conjunction with a community process. This requirement of using CAST is for two reasons. One, the values used to estimate each component of the care continuum were based upon national averages gleaned from the existing research literature. These values are likely to need to be adjusted to reflect the particular delivery models of each component within a given community or region. Two, the secondary data that is readily available for many elements of a care continuum are limited. This runs the risk of undercounting the presence of certain components, which in turn runs the risk of delegitimizing the CAST assessment within a place. Primary data collection among stakeholders as well as quality review by stakeholders are needed to mitigate this risk and to ensure data collection that is as full as possible.

After an initial phase of data collection has been completed, CAST should be shared with key community stakeholders. They should provide feedback on which elements of the estimates appear to be in alignment with their understanding of their care system, and which ones appear to be out of alignment with their understanding of their care system. At this stage, users of CAST can make adjustments to the values used in the algorithms for estimating component need. Two values in particular should be considered: the population totals and the usage rate. The population being served by any given program vary significantly across places, due to differences in geography, composition of the public/private nature of payers, and unique history of the community. Usage rate varies by the availability of a given component, geography, and the amount of outreach and system integration of a given community care system. Adjusting these totals provides each community with a method for making the CAST estimates align as closely as possible to their community characteristics. After one round of tweaks, the second, and potentially third, drafts should be reviewed again by the community stakeholders.

After the completion of a community-adapted CAST assessment, CAST can be used to facilitate the complex political conversations that arise when priorities and choices are to be made about a care system with limited resources and emotional investment from stakeholders and community members. These conversations, hopefully, will be strengthened and informed by the estimated totals produced by CAST. If the community has an adequate supply of school-based prevention programs, but few community-based prevention programs, the assessment creates an opportunity for this discussion.

Status Update

Since 2016, CAST has been updated by the principal researchers. These updates were presented in a handbook that is still available upon request. Due to changes in the SAMHSA administration and corresponding changes within the priorities of CBHSQ, the tool no longer received technical assistance from SAMHSA. The principle researcher, Brandn Green, and his colleagues Rob

Lyerla, Kristal Jones, and Donna Stroup have continued to develop and refine the tool, often in collaboration with professional evaluators who have been asked by clients to use the assessment methodology.

This status update is being completed in April of 2019, more than three years since the publication of the original CAST article. Over these three years, the principle researcher is aware of CAST being utilized to assess the care system of Chester County, PA, Sussex County, DE, Hillsborough, NH, and Maricopa County, AZ. Since September 2018, Dr. Green has been providing external consultation to the United States Army Public Health Service as they adapt the tool for use at US Army installations. This handbook update was prompted by the use of CAST to assess the five different regions of Nevada.

Appendix B: Data Sources and Definitions

Components	Definition and Units of Measurement	Data Source
Promotion		
Marketing Advertisements	Individual advertisements placed on tv, radio, print, billboards, web, and social media within one year.	Stakeholder surveys distributed by RBHCs
Media Advocacy Events	Individual, in-person gatherings meant to raise awareness of substance misuse.	Stakeholder surveys distributed by RBHCs
Community Coalitions	Individual coalitions of political, non-profit, and/or business organizations that receive and allocate grant funding to limit substance misuse.	Stakeholder surveys distributed by s
Prevention		
School-based prevention programs	Substance misuse disorder prevention programs being implemented within schools. Each program was counted as 1.	Stakeholder surveys distributed by RBHCs
Community-based prevention programs	Substance misuse prevention programs being implemented within community settings. Each program was counted as 1.	Stakeholder surveys distributed by RBHCs
Housing Vouchers for homeless residents	Dedicated beds for homeless, across all types of Continuum of Care (CoC) project types.	https://housing.nv.gov/resources/HUD_Reports/ supplemented by stakeholder surveys distributed by RBHCs
Needle Exchange	Number of locations offering needle exchange.	Web search
Prescription Drug Disposal Events/Locations	Number of drug disposal events held per year, combined with all drug disposal locations.	https://takebackday.dea.gov/, https://nabp.pharmacy/initiatives/awarxe/drug-disposal-locator/, and stakeholder surveys distributed by RBHCs
Referral		
Adult Specialty Court	All specialty courts that serve adults.	List supplied by Specialty Courts Coordinator, Administration Office of the Courts
Youth Specialty Court	All specialty courts that serve youth.	List supplied by Specialty Courts Coordinator, Administration Office of the Courts
Social Workers	Licensed social workers with a substance use or mental health focus.	National Association of Social Workers, find a social worker locator website using a substance misuse filter. Also cross-checked against occupations statistics 21-1023 (Mental Health and Substance Abuse Social Workers). Used whichever count was higher between the two sources.

Components	Definition and Units of Measurement	Data Source
Treatment		
Inpatient		
Detoxification	Facilities providing in hospital or residential detoxification.	https://findtreatment.samhsa.gov/
24-hour/Intensive Day treatment	Facilities providing non-residential, psychiatric care programs, lasting two or more hours per day for 3 or more days per week.	https://findtreatment.samhsa.gov/
Short-term (30 days or fewer)	Facilities providing less than 30 days of non-acute care in a setting with SUD treatment services.	https://findtreatment.samhsa.gov/
Long-term (more than 30 days)	Facilities providing 30 days or more of non-acute care in a setting with SUD treatment services.	https://findtreatment.samhsa.gov/
Outpatient		
Detoxification	Facilities providing outpatient/ambulatory detoxification.	https://findtreatment.samhsa.gov/
Counselors	Counselors licensed by the state to assist clients with drug and alcohol issues.	List provided by Board of Examiners for Alcohol, Drug and Gambling Counselors
Psychiatrists	Psychiatrists listed as specializing in substance use disorders.	http://finder.psychiatry.org/ Cross-checked/supplemented by https://www.psychologytoday.com/us/psychiatrists/substance-abuse/nevada
Psychologists	Psychologists listed as specializing in substance use disorders.	https://www.psychologytoday.com/us/therapists/addiction/nevada (only psychologists included)
Opioid Treatment program (OTP)	Providers that offer opioid treatment programs (OTPs), that offer daily supervised dosing.	https://dpt2.samhsa.gov/treatment/
Office based opiate substitution (OBOT)	Providers that offer office-based opioid treatment (OBOT), which provides medication on a prescribed weekly or monthly basis (is limited to buprenorphine).	https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/certified-physicians

Components	Definition and Units of Measurement	Data Source
Recovery Support		
Religious or spiritual advisors	Individual, religious or spiritual professionals providing SUD therapy and counseling.	Stakeholder surveys distributed by RBHCs
12-step groups for	Number of substance misuse support groups offered weekly.	https://findtreatment.samhsa.gov/locator/link-focSelfGP, https://www.lvcentraloffice.org/lvaa_printed.pdf, and http://nnig.org/meetings
Transportation for those receiving treatment	Number of vouchers provided within a year to assist those seeking treatment.	Utilized https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/nssats_directory_2018.pdf to determine which groups offer transportation assistance, supplemented by survey distributed by RBHCs. Average number of vouchers indicated by respondents to survey was used as proxy for those groups included in the report, and for which specific counts of vouchers were not available.
Employment support for those receiving treatment	Number of programs offered by each responding or reported group (number not specified counted as 1).	Utilized https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/nssats_directory_2018.pdf to determine which groups offer employment support, supplemented by survey distributed by RBHCs.
Educational support	Number of programs offered by each responding group (number not specified counted as 1)	Stakeholder surveys distributed by RBHCs
Parenting education for individuals with a use disorder	Number of programs offered by each responding group (number not specified counted as 1).	Stakeholder surveys distributed by RBHCs
Housing Assistance	Number of programs offered by each responding group (number not specified counted as 1).	Utilized https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/nssats_directory_2018.pdf to determine which groups offer housing assistance, supplemented by survey distributed by RBHCs.
Insurance Assistance	Individual professionals who provide insurance enrollment support.	https://www.nevadahealthlink.com/get-help/navigator-organizations/