What Will it Take?: Solutions to Mental Health Service Gaps in Larimer County

Mental Health and Substance Use Alliance of Larimer County
An Unincorporated Non-Profit Association and Health Alliance

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"Mental illness is a leading cause of suffering, economic loss and social problems. It accounts for over 15% of the disease burden in developed countries, which is more than the disease burden caused by all cancers."

No Health Without Mental Health (2007)

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Abstract

Behavioral health disorders, including mental illness and substance use disorders (SUDs), are serious, chronic, and potentially life-threatening health issues. In Larimer County, Colorado, tens of thousands of residents suffer from these conditions. Left untreated, behavioral health disorders can lead to poor quality of life, unstable employment, poverty, chronic health conditions, early death, and suicide. The cost to the community is high as well, with frequent use of high-cost resources such as emergency rooms and criminal justice services.

These disorders *can* be treated effectively, allowing people to function better and regain control of their lives. As is true with many chronic conditions, treatment often entails a broad continuum of services, including crisis stabilization; detox: and inpatient, outpatient, short-term intensive residential treatment, and long-term residential treatment (halfway houses and sober living homes).

Unfortunately, the majority of people with these disorders never get the treatment they need. In Larimer County, most of the people who need these services simply continue to suffer, putting great physical, emotional, and financial strain on themselves, their families, and their communities.

The Mental Health and Substance Use Alliance (MHSU Alliance) of Larimer County, a partnership of local organizations, with the assistance of a national consulting firm, NIATx, has studied existing resources, identified gaps in services, and has made recommendations to fill these gaps to create a more comprehensive set of services in the report *What Will It Take? Solutions for Mental Health Services Gaps in Larimer County*.

The MHSU Alliance's key finding: *While many quality services exist here, Larimer County does not have a continuum of mental health treatment and support services that is sufficient to meet the needs of local residents.*

The MHSU Alliance recommends the development and expansion of treatment capacity to provide services for over 5,000 residents in Larimer County each year. First, the MHSU Alliance recommends the development of a 24/7 Behavioral Health Services Center, which would provide state-of-the-art care and serve as a central hub for many services. The Center would:

- Provide onsite medical clearance/triage as well as patient-centered assessment services to get people into the right level of care
- Provide stabilization services for people experiencing mental health crises (through relocation of the existing Crisis Stabilization Unit to the new facility)
- Provide a safe place for people to withdraw from alcohol and/or drugs, and begin medication-assisted treatment (MAT) when appropriate
- Facilitate entry into treatment after stabilization of mental health crises and/or after detoxification from substances
- Provide intensive residential treatment for substance use disorders

- Facilitate entry into other community-based services, assist with overcoming barriers such as transportation, and assist uninsured and underinsured individuals with affording care

Second, the MHSU Alliance also recommends that funds be earmarked for community services to expand access to step-down housing; provide ongoing assistance for those with significant disorders in permanent supportive housing and in the community; support suicide prevention efforts; and support early identification and intervention services for youth and families.

The MHSU Alliance estimates the annual cost to provide all recommended services in the center and in the community to be $15.2 million (taking into account $6.5 million in revenues). The one-time cost of construction of a new 60,000-square-foot Behavioral Health Services Center, including projected land costs, is estimated at $33.4 million if built in 2020.

Finally, outside of the recommended budget, the MHSU Alliance also recommends that existing organizations and service providers will need to continue to expand outpatient treatment for substance use disorders, including medication-assisted treatment and intensive outpatient treatment, in order to meet the treatment needs of additional individuals being engaged in treatment through new and improved Larimer County services.

There is ample evidence to demonstrate significant value and benefits of the treatment of behavioral health disorders. Patients and families benefit from increased health, well-being, and the ability to function in their family, work, community, and society (similar benefits as those seen for managing symptoms of diabetes or hypertension). Communities realize reductions in related costs. The National Institute of Health estimates that every dollar spent on addiction treatment yields a return of between $4 and $7 in reduced drug-related crime, criminal justice costs, and theft. When healthcare associated cost avoidance related to reduced use of emergency department (EDs), ambulance, and inpatient treatment are included, the total cost reductions can exceed costs by a ratio of 12 to 1.

Executive Summary

Introduction

Behavioral health disorders, including mental illness and substance use disorders, are serious, chronic, and potentially life-threatening health issues. In Larimer County, Colorado, tens of thousands of residents have a mental illness, a substance use disorder, or both. Effective treatment and support services for these disorders do exist, but due to insufficient local resources and critical service gaps, only a small percentage of those who need help get it. The great majority of people who need these services in Larimer County simply continue to suffer, putting great physical, emotional, and financial strain on themselves, their families, and their communities.

In recent years, several organizations have recognized the severe gaps in local behavioral health services and called for an improved behavioral healthcare system. In 2015, the MHSU Alliance of Larimer County, a partnership of local organizations, consumer and family advocates, and treatment and service providers, declared that its highest priority was to determine the extent of the need and to create a plan to expand critical behavioral health services. *What Will It Take? Solutions for Mental Health Services Gaps in Larimer County* is the result of the MHSU Alliance's investigation.

This document is intended to:

- Delineate what is needed for a more complete continuum of care capable of providing adequate levels of affordable care for those with behavioral health needs (focusing on the best evidence, high quality, and access to care); understand what actually exists in our community; and determine the gaps
- Determine a cost estimate for filling the gaps, potential revenue sources, and the remaining need for funding

The MHSU Alliance's aim is to help citizens and service providers understand the existing challenges, garner commitment to making improvements, and stimulate significant development and expansion of critical behavioral health services in Larimer County. Ultimately, our goal is to ensure that Larimer County has the resources needed to meet the growing behavioral health needs of its citizens.

The MHSU Alliance engaged the services of the NIATx group to aid in data collection, analysis, and development of the recommendations in this document. NIATx, a multidisciplinary team of consultants with expertise in public policy, agency management, and systems engineering, has worked with more than 1,000 treatment providers and more than 50 state and county governments.

The Need for Behavioral Health Services in Larimer County

Behavioral health disorders, including mental illness and substance use disorders, are common. In Larimer County, approximately 53,800 adults (ages 18 and older) have a mental illness, and

just over 12,300 of those individuals have a serious mental illness. Approximately 26,000 have a substance use disorder (many suffer from both mental health and substance use disorders). Like other common chronic health conditions, such as diabetes and heart disease, these conditions can affect people of all ages and all socioeconomic backgrounds.

Left untreated, behavioral health disorders can lead to greater suffering from symptoms, poor quality of life, a reduced ability to function, and the use of more intensive and higher-cost treatment. People with behavioral health disorders are also at risk for unstable employment, poverty, chronic health conditions, early death, and suicide. In fact, adults living with serious mental illness die on average 25 years earlier than others. The cost to the community is high as well. Many people who don't get adequate treatment repeatedly use high-cost community services such as emergency departments and criminal justice services.

Behavioral health disorders *can* be treated effectively, allowing people to function better and regain control of their lives. As is true with many chronic conditions, ongoing treatment and support involving a broad continuum of services designed to meet evolving needs, is often necessary. This continuum of services includes assessment; crisis stabilization; detox/withdrawal management (WM) services; inpatient treatment; outpatient and intensive outpatient treatment including medication-assisted treatment, residential treatment, and step-down and supportive housing options such as halfway houses, sober living homes, and permanent supportive housing.

Effective treatment for these disorders imparts significant benefits. Patients (and their families) benefit from improved health and well-being, as well as the ability to function in the family, at work, and in the community. Communities gain active and functioning residents and see reduced law enforcement and corrections-related expenses. Indeed, every dollar spent on addiction treatment yields a return of $4 to $7 in reduced drug-related crime and criminal justice costs, according to the National Institute on Drug Abuse, part of the National Institutes of Health. When savings related to healthcare, such as a lower use of emergency departments, ambulance services, and inpatient treatment, are included, savings can exceed costs by a ratio of 12 to 1.

Unfortunately, the majority of people with these disorders never get the treatment they need. In Larimer County and many other communities, patients and family members often experience great difficulty in accessing treatment and related services, due in large part to a severe shortage of local resources. A lack of treatment resources is particularly true in the area of substance use disorders.

In Larimer County, an estimated 26,000 people have a substance use disorder and currently need treatment, yet only about 2,300 actually receive care each year. This means that, each year, tens of thousands of residents in the County need, but do not get, treatment. Although many of these people are not yet seeking treatment, about 1,200 do want or would seek help, but are unable to get it due to the absence of many critical levels of care in the County. Due to the lack of local detoxification services, many of the people not yet seeking treatment but needing to safely detox from alcohol and/or drugs, currently end up in local jails and emergency departments where they are typically released without any follow up care. This is often an ongoing strain on those resources (law enforcement, EMS, emergency departments) due to the revolving door these residents continue to go through, and is extremely costly.

In order to meet the treatment needs of our citizens in Larimer County, this investigation found that it will be necessary to make treatment and related services available for over 5,000 people each year (about 2,300 who currently get some form of treatment, plus about 1,200 who are seeking but not getting treatment due to a lack of services, plus approximately 1,200 more who might be persuaded to seek treatment given better engagement and outreach through a local detox, as well as accounting for local population growth of an additional 500).

Providing a full and improved continuum of care each year for these people is critical to their recovery. However, current local treatment and support services are insufficient to meet that demand. As a result, far too many Larimer County residents with mental illness and/or a substance use disorder simply are not getting the behavioral healthcare they need.

Key Finding

While many quality services exist here, Larimer County does not have a continuum of mental health treatment and support services that is sufficient to meet the needs of the many County residents with mental illnesses and/or substance use disorders.

Key Recommendations

The MHSU Alliance of Larimer County recommends the expansion of existing community-based treatment and support services, along with the development of a 24/7 Behavioral Health Services Center. These recommendations would provide a new state-of-the-art model of care for people with mental illness and/or substance use disorders.

The Behavioral Health Services Center and related services would:

- Bring missing levels of care to our community, so people can get the affordable care they need (Detox, residential treatment, etc.)
- Expand local services that are currently available only to limited residents (such as medication-assisted treatment, etc.)
- Enable a more thorough, formal, patient-centered assessment process that will help people enter the right level of care at the right time
- Ensure that transitions between levels of care are seamless and efficient
- Reduce the number of people who go through withdrawal in jail, an emergency room, or on the street, by providing a place to safely detox (where they can also get connected to treatment and begin a path to recovery)
- Facilitate entry into treatment from crisis and detoxification levels of care

Recommended services to be provided at the Center include:

- Triage, medical clearance examination, and various levels of assessment and re-assessment
- An existing Crisis Stabilization Unit (CSU) would be moved to the Center
- A range of withdrawal management (drug/alcohol detoxification) services

- Residential treatment for substance use disorders
- Care coordination to ensure connection to and coordination with community-based treatment
- Transportation services to reduce the burden on local law enforcement and EMS and assist with access to services in rural areas of Larimer County

Funds should also be earmarked to expand existing services in the community, including:

- Early-identification and early-intervention services and resources for youth and families at risk for, or experiencing, mental illness or substance use issues or disorders
- Suicide prevention efforts
- Staffing for long-term residential treatment (halfway houses) to help people transition from inpatient treatment to community living
- Support services to enable treatment and care coordination for people living in Permanent Supportive Housing
- Moderately intensive to intensive care coordination for people with particularly intensive and complex needs

Funds should also be earmarked to help people who can't afford to pay the full cost of care, including those who need:

- Outpatient treatment (OP)
- Intensive Outpatient treatment (IOP)
- Medication-Assisted Treatment (MAT)

Additional community services may need to be expanded or developed in order to meet the needs of additional people being engaged in treatment, including:

- Outpatient treatment (OP)
- Intensive Outpatient treatment (IOP)
- Medication-Assisted Treatment (MAT)
- Voluntary sober-living options such as Oxford Houses (more capacity is needed)

Because there are other funding sources for these services, they have not been included in the budget for recommended service expansion.

Specific Recommendations

Specific recommendations to create and support services include:

1. **Expand treatment capacity** to provide services to over 5,000 adults. The total annual utilization of all services included in the recommended model is estimated at over 10,000 admissions (defined broadly).

2. **Provide most services in one facility** to create efficiencies and a better continuum of care.

3. **Create the ability to perform medical clearance screenings and triage on-site** to reduce the need for emergency-room levels of care and transport to other levels of care.

   Provide in-depth assessment and re-assessment (differential diagnosis) on site in order to place patients in appropriate levels of care.

4. **Move the existing Crisis Stabilization Unit to the Behavioral Health Services Center,** to provide walk-in crisis assessment and short-term crisis stabilization for people whose symptoms and treatment can be managed in non-hospital settings. *Build 16 beds with the capacity to provide up to 1,700 admissions. Begin operation with approximately 10 beds for up to 700 admissions.*

5. **Create a Withdrawal Management Center (drug/alcohol detoxification) in the Behavioral Health Services Center** to support detox from alcohol or drugs and transition individuals into treatment. Provide social (clinically managed) (American Society of Addiction Medicine [ASAM level 3.2]) and medically-monitored (ASAM level 3.7) levels of detox services; start patients on medication-assisted treatment for alcohol and opioid use disorders; and support more ambulatory detox (ASAM level 2.0) managed on an outpatient basis in the community. Those with higher-level medical needs will continue to access the intensive inpatient detoxification services (ASAM level 4.0) provided in local hospital settings. *Build 32 beds with the capacity for approximately 4,300 annual admissions. Begin operations with 26 beds with the capacity for approximately 3,500 admissions per year.*

6. **Create or support several levels of residential care to support up to 795 short-term and long-term supported residential admissions,** as follows:
   - **Create a short-term, intensive residential treatment unit** in the facility, which would provide a safe therapeutic environment where clinical services and medications are available to patients who are medically stable and withdrawn from substances. *Build 16 beds with the capacity for up to 400 annual admissions. Begin operations with 13 beds with the capacity for up to 320 admissions per year.*
   - **Support low-intensity residential services** designed to build and reinforce a stable routine in a safe and supportive context for residents who lack a stable living environment. Provide 24/7 certified addiction counselors. *Encourage development of facilities (55 beds) by community providers.*
   - **Encourage the expansion/development of independent, voluntary sober housing** in the community, such as Oxford Houses, to provide safe and supportive living environments for those who choose and can pay for this type of residence. No external financing is recommended for this type of housing.

7. **Provide funding to support behavioral health support services,** including:
   - Early-identification and early-intervention services and resources for youth and families at risk for or experiencing mental illness or substance use issues or disorders
   - Suicide prevention efforts
   - Moderately intensive to intensive care coordination for up to 250 clients
   - A client assistance fund to help cover needs such as transportation, co-pays (including for IOP and OP), medication, and personal emergencies for up to 1,400 clients

- Support services in Permanent Supportive Housing for up to 100 clients with chronic health conditions who lack family/social supports and are disconnected from employment and other community functions (housing to be provided by other sources)

8. **Encourage the development of community capacity for intensive outpatient services** for individuals who require a more structured substance use disorder outpatient treatment experience than traditional outpatient treatment. *Capacity needed: 1,400 IOP admissions, an average of 30 visits per admission, and an average daily census of 63*. (Note: Since health insurance is likely to cover these services, this document's budget recommendation is for financial assistance for up to 175 uninsured or underinsured individuals.)

9. **Encourage the development of community capacity for outpatient substance use disorder treatment, including medication-assisted treatment** to provide up to 4,700 admissions. (Note: Since health insurance is likely to cover these services, this document's budget recommendation is assistance for up to 525 uninsured or underinsured people.)

Financial and Facility Needs

Financial Resources Needed

The estimated annual cost to provide these services is $15.2 million (taking into account an anticipated $6.5 million in client and payer revenues).

Projected Overall Operating Budget	
Personnel	$11.7 million
Operational (operational costs, maintenance, equipment, contracted services, etc.)	7.2 million
Client Assistance	2.3 million
Family and Youth Resources and Suicide Prevention Resources	0.5 million
TOTAL	**$21.7 million**
Less Client and Payer Revenues	6.5 million
Needed Annual Funding	**$15.2 million**

Facility Needs and Associated Costs

Estimates for facility space and costs are based on providing many services in one facility. Based on current estimates, a 60,000square-foot facility is needed. Total facility and estimated land costs are estimated at $33.4 million (if built in 2020). Facility costs have not been included for low-intensity residential services. Land costs will depend on the site selected.

Similar to other dedicated, state-of-the-art health facilities in the area, such as the $20M Cancer Center built by UCHealth in 2014, this facility will house key treatment services in one place. This “No Wrong Door” type of system is considered best practice in the health care sector. One key difference is that the services provided by other healthcare facilities, such as the Cancer Center, are paid for by health insurance; while only about 30% of costs of the recommended behavioral health treatment services would receive insurance reimbursement. This results in the funding gap of about $15 million a year.

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History of the MHSU Alliance and Introduction to the Need

This report is the result of efforts of the MHSU Alliance of Larimer County (formerly the Community Mental Health and Substance Abuse Partnership of Larimer County before mid-2016) and a sub-group of Alliance Members coming together as a "Guidance Team."

The MHSU Alliance, established in 1999, is a collaborative effort between over twenty organizations, consumers, consumer and family advocates, and treatment and service providers (see Appendix G for MHSU Alliance membership list and Appendix H for Guidance Team membership list).

The overarching goal of the MHSU Alliance is to restructure our system of mental health and substance use services, significantly improving responsiveness to the needs of people affected by substance use disorders and mental illness in our community. The MHSU Alliance's vision is for a well-coordinated, well-funded continuum of substance use and mental health services, which will achieve our maximum potential for meeting community needs and promote a healthier community through healthier individuals and families.

The MHSU Alliance operates under an Unincorporated Nonprofit Association agreement, has a joint budget funded in part by its members, and is convened and staffed by the Health District of Northern Larimer County. Decision-making is by a Steering Committee and is based on recommendations made by workgroups and staff.

Since its inception, the members of the MHSU Alliance have worked on innovative, collaborative improvements. After an initial assessment in February 2001, the MHSU Alliance published its report, "Mental Illness and Substance Abuse in Larimer County: The Challenges We Face Today." That report, along with a follow-up report in 2008, "Mental Illness and Substance Abuse in Larimer County: Foundation of Progress, Future of Hope," fueled ongoing planning to address the top priorities for change. The MHSU Alliance has a long history of successful systems level changes and new programs. A few key examples of these include:

- Transforming previously separate mental health and substance use disorder treatment services into "co-occurring capable" services, including the integration of services at the nonprofit organization now called SummitStone Health Partners.
- Training professionals and community members in how to best respond to the needs of those with mental illnesses and substance use disorders.
- Development of the Connections Mental Health & Substance Use Resources program in partnership with the Health District and SummitStone Health Partners. Connections helps community members' access behavioral health treatment and support services through information, referral, care coordination, connection to low-cost services, and other supports.
- Working with the Poudre Valley Health System to develop the Crisis Assessment Center (CAC) at the Poudre Valley Hospital Emergency Room, creating a unified approach to those experiencing mental health and substance use related crises.
- Development of a "Crisis Consistency Matrix" decision-support tool to help first contacts and responders know how to assess a behavioral health crisis situation and determine the

best place to take the person in crisis for care; ongoing updates and training on use of the matrix.
- Development of Community Dual Disorders Treatment team (CDDT) based on the evidence-based practice Integrated Dual Disorder Treatment (IDDT), for those with the most severe co-occurring mental illness and substance use disorders.
- Development of transportation options from Larimer County to the (North Range Behavioral Health (NRBH) Detox facility located in Weld County.
- Placement of Integrated Care Teams, including psychiatric care, at the Fort Collins Salud Family Health Center and the Family Medicine Center, expanding the ability of primary care clinics to address behavioral health issues.

The community has also developed critically important new services over the past few years. For example:

- In 2014, an evidence-based Assertive Community Treatment (ACT) team was developed by SummitStone Health Partners and now has also incorporated the local Integrated Dual Disorders Treatment (IDDT) team within its services to provide people with severe mental illness and/or substance use disorders with intensive, evidence-based treatment and support services.
- In 2015, the Crisis Stabilization Unit began operation in Fort Collins, providing ten beds for 24/7 crisis stabilization and one 23-hour observation bed.
- From 2015-2017, due to changes in payment structures, some Intensive Outpatient Programs (IOPs) have been developed in Larimer County.
- In 2016, the Connections Program expanded its services to assist youth and families through the Child, Adolescent and Young Adult Connections (CAYAC) team, which help youth and families with potential, emerging, and existing behavioral health challenges navigate the process of assessment, treatment, and ongoing recovery.
- Since the 2016 report, the number of medication-assisted treatment providers has significantly increased. There are now at least fifteen clinics in Larimer County that provide some level of medication-assisted treatment services to their clients. A table of current medication-assisted treatment providers is included in the list of SUD treatment services provided in Appendix J.
    - SummitStone has added weekly medication-assisted treatment induction clinics for Suboxone and Vivitrol in Loveland. Induction for Vivitrol is also available in Fort Collins, and SummitStone is hoping to offer Suboxone induction in the near future. For now, Fort Collins clients can go to Loveland for induction. Many of SummitStone's medication-assisted treatment clients also choose to participate in SummitStone's Acudetox services which uses acupuncture to reduce the symptoms associated with addiction recovery including withdrawal symptoms, cravings, and anxiety.
    - Behavioral Health Group has added Suboxone services in addition to their Methadone services and is able to serve up to 200 clients between the two treatment programs.
    - Front Range Clinic has opened locations in Fort Collins and Loveland where clients can receive medication-assisted treatment (Suboxone or Vivitrol) in an outpatient setting, supported by in-house outpatient behavioral health treatment and case management. The clinic accepts all insurance, including Medicaid, and clients are

able to access services at any of the clinic's locations in order to receive more timely access to treatment.
    - The Colorado Clinic has expanded the number of providers who are licensed to prescribe Suboxone.
- SummitStone expanded its adolescent SUD team in the past year and a half. More prevention, education, and treatment is now happening in in the community and outpatient locations.
- Harmony Foundation (in Estes Park) has expanded its medically-monitored withdrawal management program from seven beds to 23 for those with private insurance or the ability to pay out of pocket.
- Larimer County law enforcement agencies received a grant to help fund their behavioral health co-responder program. The model is one where police officers team up with behavioral health specialists to respond to incidents where a person may need crisis intervention for mental health or substance abuse issues. The grant award comes from the Colorado Department of Human Services Office of Behavioral Health, and the funding will allow the Larimer County Sheriff's Office, Fort Collins Police Services, and the Loveland Police Department to pair trained behavioral health specialists with police. Behavioral health specialists from SummitStone Health Partners, as well as the police officers themselves, will be trained to work together to help individuals get access to the resources they need. In turn, officials hope it will help avoid costly alternatives for taxpayers such as sending people struggling with mental or substance use issues to emergency rooms or the jail, creating earlier diversion alternatives for individuals.
- Mountain Crest Behavioral Health Center has added eight additional hospital-level inpatient beds, and one additional Intensive Outpatient Program (IOP) for chemical dependency.

Purpose and Approach of this Document

While this community has succeeded in expanding and improving its behavioral health services, community members remain acutely aware that there are still a number of significant needs that remain unmet. Many of the current needs, such as the need for local withdrawal management (detox) services and the lack of local residential treatment, were identified early in the MHSU Alliance's history and have grown in their intensity and impact over time; to the point that several major community organizations have mentioned the need for an improved behavioral healthcare system in their strategic plans, including Larimer County, the City of Fort Collins, and the Health District of Northern Larimer County. Others are emerging as contemporary issues as the population grows and as leaders and service providers learn more about the specific needs of people with behavioral health disorders and available best practices to address those needs.

The recommendations included in this document focus primarily on adult services, however some funding is being recommended for youth and family-oriented services. The recommendations are the result of community leaders, service providers, consumers, and community members recognizing that this community must identify the extent of, and fill, these critical gaps in the system of behavioral health care in order to give people suffering from these health disorders the same chance for recovery and health that is expected from other health care.

The first three steps to improving the behavioral health care system by providing state-of-the-art services include:

1. Delineate what is needed for a more complete continuum of care capable of providing adequate levels of care for those with behavioral health needs (focusing on the best evidence, high quality, and access to care), understand what actually exists in our community, and determine the gaps.
2. Determine a cost estimate for filling the gaps, and determine potential revenue sources and the remaining need for funding.
3. Determine community interest in developing resources to fill the service gaps.

The recommendations contained in this document address the first two steps. The purpose of these recommendations is to help citizens and service providers understand existing challenges, garner commitment to making changes and improvement, and stimulate significant development and expansion of critical behavioral health services in Larimer County in order to guarantee Larimer County's capacity to meet the growing behavioral health needs of its citizens.

The Importance of Adequate Services for Those with Behavioral Health Disorders

Behavioral health disorders, including mental illness and substance use disorders, include a wide range of serious health issues – in this case, health conditions impacting the brain – that are chronic and potentially life-threatening, similar to other chronic health disorders such as diabetes, heart disease, and cancer. These disorders of the brain are common and can affect anyone at any age or socio-economic status. They are also treatable and recovery is possible. Increasingly, research is helping treatment providers hone in on the most successful treatment approaches, and treatment effectiveness is improving. Like other health disorders, early identification and access to effective treatment is critical to reducing disability and saving lives.

Though these conditions are diagnosable health disorders, consumers and families regularly report great difficulty in getting access to the recommended range of services, a situation that is quite different than access to care for other chronic illnesses such as cancer or diabetes.

The growing body of evidence for treatment success has resulted in the development of guidelines that outline the continuum of behavioral health treatment services necessary in order for a community to adequately address behavioral health disorders and minimize their impact on community members and the community itself.

When our community's services were compared to this continuum of services, our analysis (outlined in depth later in this document) indicated that many excellent treatment services for behavioral health disorders exist in Larimer County. In some areas our community is close to the amount and level of care needed, or is likely to be able to reach those levels with recently expanded payer sources, if attention is paid to developing the appropriate levels for the needs – for example, in the areas of outpatient treatment, information and referral services, and the new crisis stabilization services.

However, it was also determined that many of the more intensive levels of treatment are missing or incomplete in our community, and the necessary range of support services are also not provided at adequate levels at the current time. **The key finding of this investigation is that Larimer County does not have a continuum of mental health treatment and support services that is sufficient to meet the needs of people who have mental illnesses and/or substance use disorders.** As a result, these people often simply cannot get the level of care that they need in order to address their illness and are often not connected to the appropriate level of care as their condition changes. This creates prolonged suffering for these individuals and their families, as well as puts an unnecessary strain on local law enforcement, EMS, and the emergency departments (EDs) that are often much costlier levels of care.

While many quality services are being provided, the effectiveness of these existing services is compromised by the lack of other needed services. In order to provide those who suffer from mental health disorders with the treatment most likely to effectively impact their disorder, the development of additional levels of care and state-of-the-art treatment is critical.

Summarized, this process identified a number of key levels of care to be added or expanded in a Behavioral Health Services Center in order to provide adequate standards of care in Larimer County.

- Initial assessment, triage, and medical clearance examination
- Thorough patient-centered assessment processes to accurately guide placement and transitions into and between community levels of care
- Just-under hospitalization level of care (currently available through existing CSU, but recommended to be met through moving existing CSU to facility)
- Withdrawal management (drug/alcohol detoxification) services
  - Clinically managed detox (social model)
  - Medically-monitored detox
- Residential Treatment for substance use disorders

Services that need to be developed or expanded in the community include:

- Long-term step-down residential options including “halfway houses” and “Oxford Houses”
- Outpatient treatment for substance use disorders (including medication-assisted treatment)
- Intensive Outpatient treatment services (IOP)
- Support services (moderately intensive to intensive care coordination, support services for those with chronic conditions who live in Permanent Supportive Housing, and client assistance funds)

In careful consideration of how best to provide these services, it is recommended that many of the services be grouped together in a 24-7 Services Center providing a new state-of-the-art model of care, and enabling more seamless transitions between levels of care through a true “No Wrong Door” system. This approach is an emerging best practice because of its ability to better

coordinate services and supports while reducing the burden on individuals and families who must navigate a complicated system of care during a crisis episode.

However, other services are best provided largely in the community, such as support services for those in Permanent Supportive Housing, low-acuity longer term residential treatment for substance use disorders, care coordination, and outpatient and intensive outpatient treatment.

Some services would require additional funding; other services could be expanded by existing service providers utilizing already existing revenue sources.

Each level of care is described in more detail later in this document.

The Scope and Impact of the Problem: Why a More Complete Continuum of Behavioral Health Treatment Services is Important

Mental illness and substance use disorders have significant impacts on individuals, families, and our community. A few key statistics are included here to illustrate the scope and impact of the problem. Additional statistics are reported in a companion document entitled "Supplementary Behavioral Health Research Findings and Statistics."

Prevalence of Mental Illness and Substance Use Disorders

Mental illnesses and substance use disorders are common and can impact people at any age, ethnicity, and income level.

Mental Illness

Applying Colorado data from the 2015 and 2016 SAMHSA National Survey on Drug Use and Health (NSDUH) to Larimer County, there are approximately 53,800 adults (18 and older) in this county (20.1%) who have any mental illness. Of those 53,800 people, just over 12,300 (4.6%) have a serious mental illness.[1]

Substance Use Disorders

Again extrapolating state-level 2015 and 2016 NSDUH data to Larimer County, we estimate that 8.5% of individuals aged 12 and older (25,000 people) have a substance use disorder.[1] (An additional 1,000 individuals have been added to this number to account for populations not included in the NSDUH for a total of 26,000 people.) Thousands of these individuals have more than one substance use disorder diagnosis (alcohol, heroin, marijuana, etc.) and require different types and levels of treatment to address their specific disorder(s). Alcohol is the leading

[1] Center for Behavioral Health Statistics and Quality. (2017). *2016 National Survey on Drug Use and Health: Detailed Tables.* Substance Abuse and Mental Health Services Administration, Rockville, MD.

substance of abuse and addiction; 5.6% (16,350 people) of the population aged 12 and older is reported to have an alcohol use disorder.[2]

Co-Occurring Mental Illness and Substance Use Disorders

Mental illness and substance use disorders often occur together and are referred to as co-occurring disorders.

- About a third of all people experiencing mental illness and about half of the people living with severe mental illness also experience substance abuse.[3] Similarly, about a third of all alcohol abusers and more than half of all drug abusers report experiencing a mental illness.[4]
- Extrapolating national data to Larimer County, approximately 5.9% of adults (15,500) had co-occurring mental illness and substance use disorder, and 2.0% (5,250) had co-occurring serious mental illness and substance use disorder.

Impact on Health and Longevity

Burden of Disease/Disability Adjusted Life Years (DALY's)

Mental illnesses and substance use disorders are major health problems worldwide. In "No Health Without Mental Health," the authors state that "Mental illness is a leading cause of suffering, economic loss and social problems. It accounts for over 15% of the disease burden in developed countries, which is more than the disease burden caused by all cancers".[5] According to the Global Burden of Diseases, Injuries and Risk Factors 2010 report, mental and behavioral health disorders are the leading cause of disability in the U.S.[6]

Premature Death

Mental illness and substance use disorders can significantly reduce longevity.

- Overall, a 2015 analysis of over 200 international studies over a decade found that people with mental health conditions were more than twice as likely to die over roughly 10 years, versus people without the disorders. Their risk of death from "unnatural causes", including suicide and accidents, was seven times higher. But their odds of dying from physical health conditions were also elevated, by an average of 80 percent.[7]

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[2] Ibid.
[3] Dual Diagnosis. (n.d.). Retrieved February 05, 2016, from https://www.nami.org/Learn-More/Mental-Health-Conditions/Related-Conditions/Dual-Diagnosis
[4] Ibid.
[5] Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *The Lancet, 370* (9590), 859–877.
[6] Institute for Health Metrics and Evaluation. (2013). *The State of US Health: Innovations, Insights, and Recommendations from the Global Burden of Disease Study*. Seattle, WA: Author.
[7] Rubin, Rita. (2015). Mental Disorders Linked With Chronic Disease. *The Journal of the American Medical Association,* Volume 313 (2), 125.

- Adults living with serious mental illness may die on average twenty-five years earlier than other Americans[8]; and about 60% of that additional mortality may be due to physical illness.[9]
- Also contributing is the impact of substance use, misuse, and abuse. Colorado ranks second worst among all states for prescription drug misuse among people between the ages of 12 and 25. More than 255,000 Coloradans misuse prescription drugs, and deaths involving the use of opioids nearly quadrupled between 2000 and 2011.[10]

Suicide

Suicide is death caused by intentional, self-inflicted injuries. While not always associated with behavioral health issues, it is most often related to depression and substance use. Of adults committing suicide, it is estimated that 90% have a mental health disorder[11] and this number is consistent among youth who commit suicide.[12]

- Larimer County and Colorado both have a suicide rate much higher than the national average (US: 13.9 (per 100,000)[13]; Colorado: 20.5[14]; Larimer County: 20.9[15]).
- In 2015, there were eighty-three (83) deaths by suicide in Larimer County, the highest number of suicides ever recorded by the coroner's office. In comparison to the 83 deaths by suicide, 52 people died as a result of car accidents in Larimer County in 2015. Alcohol or drugs were present in 66% of the suicides, and 35% of fatalities due to motor vehicle crashes involved drivers who tested positive for alcohol and/or drugs.[16] Only 40% were actively in treatment for a behavioral health issue. [17]

Lack of Treatment for Behavioral Health Disorders

Despite the enormous health burden of behavioral health disorders, many people with mental illness or substance use disorders do not get treatment for their condition. A key 2011 study

[8]http://www.nasmhpd.org/sites/default/files/Mortality%20and%20Morbidity%20Final%20Report%208.18.08.pdf
[9] De Hert, M., et al. (2011). Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. *World Psychiatry*, *10*(1), 52–77.
[10] Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2013). The National Survey on Drug Use and Health Report: State Estimates of Nonmedical Use of Prescription Pain Relievers. Rockville, MD: Substance Abuse and Mental Health Services Administration
[11] American Foundation for Suicide Prevention. (n.d.). Key Research Findings. Retrieved from https://www.afsp.org/understanding-suicide/key-research-findings.
[12]Shaffer, D., Craft, L. (1999). Methods of Adolescent Suicide Prevention. *Journal of Clinical Psychiatry*, *6 (Suppl 2),* 70-74.
[13] Drapeau, C. W., & McIntosh, J. L. (for the American Association of Suicidology). (2017). U.S.A. suicide 2016: Official final data. Washington, DC: American Association of Suicidology. Retrieved from http://www.suicidology.org.
[14] Colorado Center for Health and Environmental Data. (2017). Suicides in Colorado: Crude suicide rates per 100,000 population. Retrieved from https://cohealthviz.dphe.state.co.us/t/HSEBPublic/views/CoVDRS_12_1_17/Story1?:embed=y&:showAppBanner=false&:showShareOptions=true&:display_count=no&:showVizHome=no#8
[15] Ibid.
[16] Wilkerson, J.A. (2016). 2015 Annual Report: Office of the Larimer County Coroner Medical Examiner. Loveland, CO. Retrieved from https://www.larimer.org/sites/default/files/uploads/2017/2015-annual-report.pdf
[17] D. Fairman (personal communication, September 25, 2017)

stated, "A substantial proportion of adults with common mental disorders fail to receive any treatment even when these conditions are quite severe and disabling."[18]

- According to the World Health Organization, "In developed countries with well-organized health care systems, between 44% and 70% of patients with mental disorders do not receive treatment."[19] Indeed, SAMHSA indicates that on average, 44.7% of American adults who experienced mental illness in the past year received some type of mental health care.[20]
- Even fewer people with substance use disorders receive the treatment they need. Just 10% of adults with substance use disorders receive treatment in a given year, with 29% of those who do get treatment receiving care considered to be minimally adequate.[21]

Using prevalence data from N-SSATS and NSDUH, it is estimated that approximately 25,000 people in Larimer County meet the criteria for needing treatment for substance use disorders. It is also estimated that only about 2,300 people receive care for their substance use disorder(s) each year, leaving nearly 24,000 people needing but not receiving treatment. Of those 24,000, it was estimated that approximately 1,200 are ready for treatment and seek it, but do not receive that treatment. (See pages 43-51 for information on how prevalence estimates were updated since the original 2016 publication of this report.)

A number of factors may be involved in the gap between need for treatment for behavioral health disorders and accessing that treatment. One study of barriers to mental health treatment stated, "Several factors are thought to impede appropriate mental health care seeking including lack of perceived need for treatment, stigma, pessimism regarding the effectiveness of treatments, lack of access due to financial barriers, and other structural barriers such as inconvenience or inability to obtain an appointment."[22] Additional factors may also be at play, including the lack of availability of needed treatment services in the community where people live.

The Effectiveness of Treatment of Behavioral Health Disorders as Chronic Diseases

Mental and substance use disorders affect people from all walks of life and all age groups. These illnesses are common, chronic, and often serious. However, they can be managed through ongoing treatment and support. According to the National Institute for Health (NIH), Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition):

> Like other chronic diseases, addiction can be managed successfully. Treatment enables people to counteract addiction's powerful disruptive effects on the brain

[18] Mojtabai, R., Olfson, M., Sampson, N. A., Jin, R., Druss, B., Wang, P. S., R.C., Kessler, R. C. (2011). Barriers to mental health treatment: results from the National Comorbidity Survey Replication. Psychological Medicine, 41(08), 1751–1761. http://doi.org/10.1017/S0033291710002291
[19] World Health Organization, & Noncommunicable Disease and Mental Health Cluster. (2003) *Investing in mental health.* Geneva: World Health Organization. Retrieved from http://www.myilibrary.com?id=9723
[20] SAMHSA. National Survey on Drug Use and Health. Center for Behavioral Health Statistics and Quality; 2014.
[21] SAMHSA. 2014.
[22] Andrade, L. H., Alonso, J., Mneimneh, Z., Wells, J. E., Al-Hamzawi, A., Borges, G., … Kessler, R. C. (2014). Barriers to mental health treatment: results from the WHO World Mental Health surveys. Psychological Medicine, 44(06), 1303–1317. http://doi.org/10.1017/S0033291713001943

> and behavior and to regain control of their lives. The chronic nature of the disease means that relapsing to drug abuse is not only possible but also likely, with symptom recurrence rates similar to those for other well-characterized chronic medical illnesses -- such as diabetes, hypertension, and asthma that also have both physiological and behavioral components.[23]

Unfortunately, particularly in the past, when relapse occurred, some considered treatment a failure. However, NIDA states:

> Successful treatment for addiction typically requires continual evaluation and modification as appropriate, similar to the approach taken for other chronic diseases. For example, when a patient is receiving active treatment for hypertension and symptoms decrease, treatment is deemed successful, even though symptoms may recur when treatment is discontinued. For the addicted individual, lapses to drug abuse do not indicate failure -- rather, they signify that treatment needs to be reinstated or adjusted, or that alternate treatment is needed."[24]

The figures on the following page shows that the treatment for all chronic illnesses, including substance use disorders, is effective when administered but symptoms usually return after discontinuing treatment. Addiction treatment, like treatment for all chronic diseases, requires ongoing care in order to be effective.

[23] National Institute for Health. (2012). Principles of Drug Addiction and Treatment: A research-based guide. NIH Publication No. 12-4180. Retrieved from https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequently-asked-questions/drug-addiction-treatment-worth-its-cost

[24] National Institute for Health (2012)

Figure 1: Why is Addiction Treatment Evaluated Differently? Both Require Ongoing Care[25]

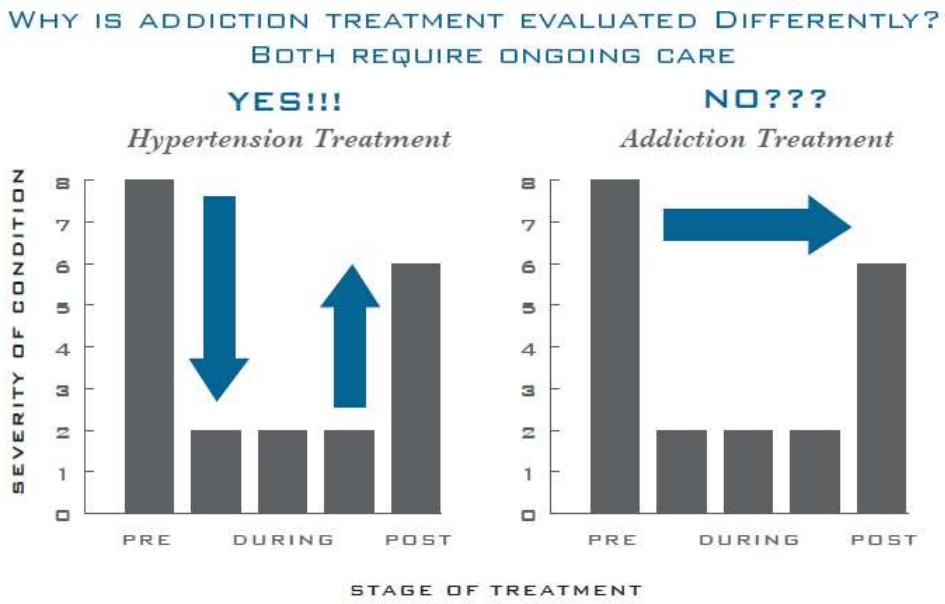
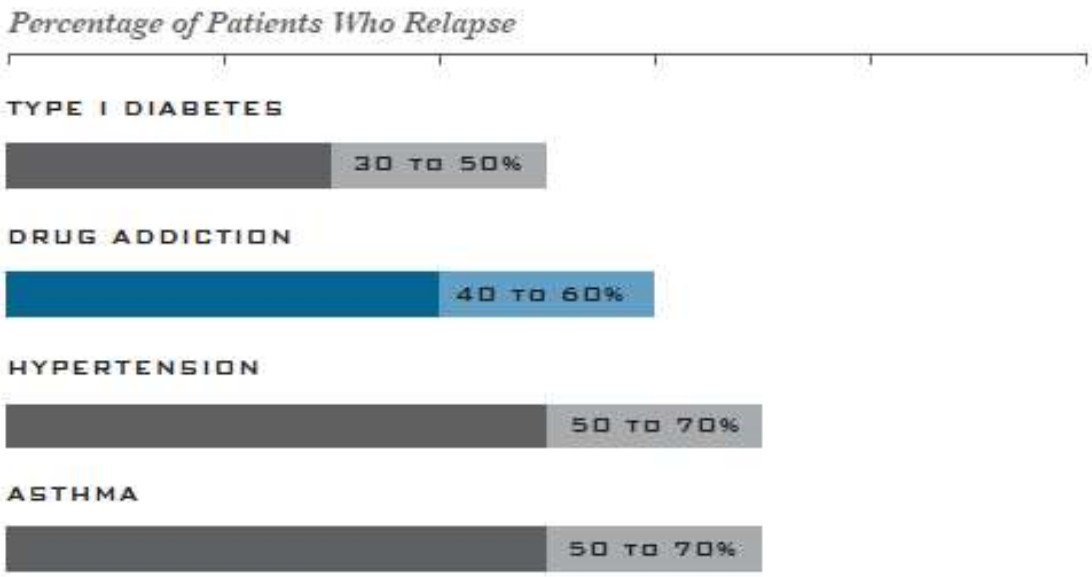


Figure 2: Percentage of Patients Who Relapse[26]



[25] National Institute for Health (2012)
[26] National Institute for Health (2012)

Additionally, the effectiveness of treatments for chronic illnesses vary depending on the specific circumstances affecting each individual situation, resulting in varying levels of treatment success and different definitions of treatment success for each individual in treatment. The National Institute on Drug Abuse states that, "In addition to stopping drug abuse, the goal of treatment is to return people to productive functioning in the family, workplace, and community." According to research that tracks individuals in treatment over extended periods, most people who get into and remain in treatment stop using drugs; decrease their criminal activity; and improve their occupational, social, and psychological functioning. For example, Methadone treatment has been shown to increase participation in behavioral therapy and decrease both drug use and criminal behavior. However, individual treatment outcomes depend on the extent and nature of the patient's problems, the appropriateness of treatment and related services used to address those problems, and the quality of interaction between the patient and his or her treatment providers.[27]

When people with behavioral health disorders do not receive appropriate, timely, or adequate treatment, the result is often greater suffering from symptoms; impacts on overall health and longevity; reduced ability to function in their families, school, work, or social activities; utilization of additional, more intensive and higher cost levels of treatment; and utilization of high cost services such as emergency departments and involvement in the criminal justice system. SAMHSA reports that those with undiagnosed, untreated, or undertreated co-occurring mental illness and substance use disorders may suffer from a higher likelihood of experiencing homelessness, incarceration, medical illnesses, suicide, and early death.[28]

Impact on Self-Sufficiency and Cost to Society

Health Problems and High Health Costs

Behavioral health conditions can be associated with poorer physical health as well as higher health costs overall:

- Medical costs for treating those patients with chronic medical and comorbid mental health/substance use disorder (MH/SUD) conditions can be 2-3 times as high as for those who don't have the comorbid MH/SUD conditions. The *additional* healthcare costs incurred by people with behavioral comorbidities were estimated to be $293 billion in 2012 across commercially-insured, Medicaid, and Medicare beneficiaries in the United States.[29]
- According to a 2015 study of 155 high utilizers of the Larimer County Jail, the high utilizers were also frequent utilizers of acute, high cost services. They had 136% higher Medicaid costs than other Larimer County Medicaid patients. Roughly 9 of every 10 of those studied were identified as having substance use problems, nearly half had a mental illness, and almost all of those with mental illnesses also had a co-occurring substance use disorder. Sixty-five percent of visits to the Emergency department at Poudre Valley

[27] National Institute for Health (2012)
[28] Substance Use Disorders. (n.d.). Retrieved February 05, 2016, from http://www.samhsa.gov/disorders/substance-use
[29] Melek, S., Norris, D., & Paulus, J..(2014). Economic Impact of Integrated Medical-Behavioral Healthcare. Denver, CO: Milliman, Inc. for American Psychiatric Association.

Hospital by these individuals were identified as related to substance use (primarily alcohol).[30]

Unemployment, Underemployment, and Poverty

Mental illness and substance use disorders are often associated with problems with employment as well as being at risk for poverty and homelessness.

- People with disabilities have high unemployment rates and people with serious mental illnesses have the highest unemployment rate of any group with disabilities.[31]
- According to a NAMI 2014 report, over 80% of those with serious mental illness are unemployed.[32]

Financial Impacts

It is difficult, if not impossible, to put a cost on human suffering. However, it is possible to at least begin to understand the staggering financial impact of behavioral health disorders, remembering that they are quite often untreated or not adequately treated.

- The Substance Abuse and Mental Health Administration estimated that the U.S. national expenditure for mental health care alone was $147 billion in 2009.[33]
- Combining these figures with updated projections of lost earnings and public disability insurance payments associated with mental illness, an estimate for the financial cost of mental disorders was at least $467 billion in the U.S. in 2012.[34]
- Illicit drug use, often related to substance use disorders and mental illness, costs Americans $193 billion in overall costs (including health care, loss of work productivity, and costs related to crime).[35]

Lost Productivity

Behavioral health disorders impair functioning, resulting in impacts on work and home life.

- One study showed that approximately 80% of persons with depression reported some level of functional impairment because of their depression, and 27% reported serious difficulties in work and home life.[36] Impacts on work functioning include reduced

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[30] TriWest Group. 2015. *Larimer County High Utilizer Study*. (2015). Larimer County, Colorado: Health District of Northern Larimer County and the Community Mental Health and Substance Abuse Partnership of Larimer County.
[31] National Governors Association. (2007). Promoting Independence and Recovery through Work: Employment for People with Psychiatric Disabilities. Washington, D.C.: National Governors Association.
[32] Dlehl, S., Douglas, D., & Honberg, R.. (2014). *Road to Recovery: Employment and Mental Illness*. Arlington, VA: National Alliance on Mental Illness. Retrieved from https://www.nami.org/About-NAMI/Publications-Reports/Public-Policy-Reports/RoadtoRecovery.pdf
[33] Substance Abuse and Mental Health Services Administration. (2013). National Expenditures for Mental Health Services and Substance Abuse Treatment, 1986–2009. HHS Publication No. SMA-13-4740. Rockville, MD: Substance Abuse and Mental Health Services Administration.
[34] Insel, T.R. (2011). Director's Blog: The Global Cost of Mental Illness. Retrieved from http://www.nimh.nih.gov/about/director/2011/the-global-cost-of-mental-illness.shtml
[35] National Institute on Drug Abuse. (2015). Trends and Statistics. Retrieved from http://www.drugabuse.gov/related-topics/trends-statistics
[36] Pratt, L. & Brody, D.. (2008). Depression in the United States household population, 2005-2006. National Center for Health Statistics Data Brief, 7. Retrieved from from:http://www.cdc.gov/nchs/data/databriefs/db07.htm#ref08

productivity due to both absenteeism as well as presenteeism, whereby workers show up to work but produce reduced results.
- According to a 2002 study, "mental illness is the number one cause of disability for American business and industry today and is second only to cardiovascular disease in total disability costs."[37]

Service Utilization and Related Costs

Many people who don't get the right service or treatment enter a cycle of repeated use of the highest cost services in our community, such as emergency departments, or may become involved with the costly criminal justice system.

- For example, according to the 2015 Frequent Utilizer Study done in Larimer County, 72% of visits to the Poudre Valley Hospital Emergency department by 155 high utilizers of the Larimer County Jail were related to mental health and/or substance use.[38]
- This same group of 155 high utilizers of acute and crisis services are costing our community over $2.2 million dollars in potentially avoidable costs each year. Despite these costs, high utilizers are not experiencing improvements in their underlying mental illnesses and substance use disorders or their service utilization over time.[39]

Criminal Justice and Community Safety

Adults with serious mental illness are at increased risk for criminal justice involvement.[40] According to a 2015 Urban Institute study, they tend to stay in jail longer than those without mental illnesses, return to jail more often, and cost local jurisdictions more money while incarcerated. More frequently than not, they are jailed for minor offenses such as trespassing, disorderly conduct, disturbing the peace, or illicit drug use.[41]

- 30% of inmates at the Larimer County Jail at a point in time in 2016 had a mental illness; 52% had substance use related issues; and 27% had co-occurring mental illness and substance use.[42]
- 26% of the general population (without mental illnesses or substance use disorder) at the Larimer County Jail recidivated (returned to jail) in 2016. Comparatively, during the same year, 66% of those with mental illnesses, 65% with substance use disorders, and 69% of those with co-occurring disorders recidivated.[43] These percentages are fairly consistent with what the jail has seen in previous years (in 2013 the percentages varied by up to two percentage points).

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[37] Marlowe, J.F. (2002). Depression's surprising toll on worker productivity. *Employee Benefits Journal*, *27*(1): 16-21.
[38] TriWest Group. 2015.
[39] TriWest Group. 2015.
[40] Munetz, M.R., Grande, T.P., Chambers, M.R. (2001). The incarceration of individuals with severe mental disorders. *Community Mental Health Journal Aug; 37(4)*: 361-372.
[41] Kim, K., Becker-Cohen, M., & Serakos, M. (2015). The Processing and Treatment of Mentally Ill Persons in the Criminal Justice System. Retrieved from http://www.urban.org/UploadedPDF/2000173-The-Processing-and-Treatment-of-Mentally-Ill-Persons-in-the-Criminal-Justice-System.pdf
[42] D. Stalls (personal communication, August 18, 2017)
[43] D. Stalls (2017)

- More than one-tenth of costs of behavioral health treatment were spent in jails in 2011, equaling more than $93 million.[44]

Timely and adequate treatment for behavioral health disorders has the potential to significantly reduce these impacts and thereby provide remarkable value to individuals impacted by mental illness and/or substance use disorders, their families and friends, workplaces, and the community itself.

Process for the Development of this Report

A report was originally released in February of 2016 as "Recommendations for the Development of Critical Behavioral Health Services in Larimer County" and was updated slightly in April of 2016. This report is the result of an update of the original 2016 report to reflect current community needs and opportunities. The initial NIATx report from 2016 is included as Appendix K of this report. The application and modification of NIATx's report by local experts in 2016 is included in Appendix L. For this update, NIATx provided a written response to the updates that were made to the original report and the current recommendations of the Guidance Team, which is included in Appendix M. Application and modification of NIATx's 2018 input is included on pages 43-51 of this report.

As work on the development of these recommendations began, the Guidance Team adopted the following objective, vision, and process:

Objective

Create recommendations to inform a future plan that would make significant headway in filling critical gaps in behavioral health care services for those experiencing the health conditions of mental illness and substance use disorders in Larimer County.

Vision

Larimer County residents with mental illnesses and/or substance use disorders will:

- Achieve their optimal recovery and health
- Have an equivalent level of support and effective treatment available as community members with other chronic and potentially life-threatening illnesses such as cancer, diabetes, and heart disease
- Receive the most effective diagnostic, treatment, and supportive services in a timely manner in the community in which they live.

[44] TriWest Group. (2011)

Our community will:

- Be a thriving, productive, and safe place to live that supports mental and emotional well-being and a high quality of life for its citizens
- Maintain and add to its world-class status through providing the standard of care for behavioral health care treatment as an integrated and critical part of its state-of-the-art healthcare system
- Make the most of limited resources and reduce the avoidable use of inappropriate and high cost acute, crisis, and intensive services such as emergency departments, hospitals, criminal justice, detention centers, etc.

Process

1. **Identify the behavioral health services most needed in the community.** Clearly identify and list the most critical gaps in services, including background to indicate why changes are needed. In evaluating and describing the needed services, utilize nationally recognized or adopted levels and standards of care and state-of-the-art treatment approaches.

2. **Determine the level of need for each identified service.** Analyze the projected need and utilization of the identified services, now and into the future.

3. **Perform financial analysis.** For the identified services and level of projected use, estimate the projected cost as well as revenues and resources potentially available for operation of the services (now and into the future); determine level of gap in funding, if any. If gaps exist, determine potential approaches for funding the gaps. Develop an estimated pro forma balancing projected funding with prioritized services.

4. **Create recommendations to inform the creation of a plan for the development and implementation of critical services.** Create basic combined recommendations listing the services (levels of care and standards of care) to be provided, the estimated amounts of care, the proposed organization of care for effectiveness and efficiency, and an estimated balanced funding approach.

5. **Analyze potential benefits to individuals and the community.** Determine how impact will be measured and create informed estimates of anticipated benefits.

Methods and Limitations

The development of these recommendations consisted of two phases:

Phase I: Mapping and Analysis of Existing Substance Use Disorder Services by American Society of Addiction Medicine (ASAM) Levels of Care

1. MHSU Alliance staff completed a project to map existing substance use disorder services in Larimer County by ASAM level, and to collect detailed information about services and gaps in those ASAM levels identified as potentially not having sufficient service capacity. Data

collection from direct service providers included: capacity information, service utilization, referral systems, and programmatic detail.

2. The MHSU Alliance and the Guidance Team identified the key mental health services listed in this document as those most needed in the community to fill current gaps in mental health services. Although a tool similar to the ASAM tool for substance use disorder services was not discovered, the need for these services was mentioned consistently in a series of discussions of need in 2014 and 2015.

Phase II: Analysis of Gaps in Services and Recommendation of Services Needed

1. To aid in data collection, analysis, and development of recommendations, the MHSU Alliance engaged the consulting services of the NIATx Group in the development of these recommendations. NIATx is a multidisciplinary team of consultants with a unique blend of expertise in public policy, agency management, and systems engineering. NIATx has the benefit of having worked with 1,000+ treatment providers and 50+ state and county governments. NIATx is also affiliated with the Addiction Treatment Technology Center (ATTC) Network. The ATTC Network is responsible for cataloging and providing training on evidence-based practices throughout the United States and its territories. The specific consultants who worked on this project are:
   - Todd Molfenter, Ph.D., Principal, NIATx
   - Victor Cappoccia, Ph.D., Senior Scientist, NIATx
   - Colette Croze, Principal, M.S.W., Croze Consulting

2. MHSU Alliance staff and NIATx consultants collaborated in data collection, and NIATx performed data analysis on data from a variety of sources, including collection of utilization data from the following organizations:
   - Colorado Access Behavioral Care: the Behavioral Health Organization (BHO) for Northeast Colorado which manages services for people with Medicaid behavioral health coverage
   - Rocky Mountain Health Plans: the Regional Care Coordination Organization (RCCO) for Larimer County which manages services for people with Medicaid medical coverage
   - Signal Behavioral Health Network: the Managed Services Organization (MSO) for Larimer County which manages and coordinates substance use treatment contracts and manages data related to SUD treatment utilization
   - Northeast Behavioral Health: the former BHO for the region and current manager of crisis stabilization services for Larimer and Weld Counties
   - Data collection from direct service providers as needed

Throughout the process, additional background information was gathered from members of the MHSU Alliance and interviews with providers, consumers, and other community members, including case examples illustrating service gaps. Additionally, the Guidance Team for this project, a Subcommittee of the MHSU Alliance, discussed findings and recommendations and provided guidance throughout the development of this document in both 2015/16 and 2017/18.

Phase I: Mapping and Analysis of Existing Substance Use Disorder Services by American Society of Addiction Medicine (ASAM) Levels of Care

Introduction to Mapping Project

The MHSU Alliance identified the goal of providing the most effective services for those with substance use disorders as their top priority in 2013, and reaffirmed this in early 2017. Staff embarked on an effort to map local service availability compared to service needs to address these illnesses at all levels of severity. As a result of the study of effective approaches, it became clear that Larimer County has specific gaps in services for individuals with substance use disorders.

To determine the levels of care that a community needs to effectively treat substance use disorders, the MHSU Alliance used the levels developed by the American Society of Addiction Medicine (ASAM). Criteria were developed by ASAM through a collaborative process "to define one national set of criteria for providing outcome-oriented and results-based care in the treatment of addiction". They have become the "most widely used and comprehensive set of guidelines for placement, continued stay, and transfer/discharge of patients with addiction and co-occurring conditions."[45]

Importance of a Quality Assessment-Based System in Placing a Person in the Right Level of Care

To determine the right level of care for an individual at any stage of needing assistance, the critical first step is a comprehensive assessment, performed by a well-trained professional. This assessment determines the appropriate level of care for that individual at that time, based on the following six (6) dimensions:[46]

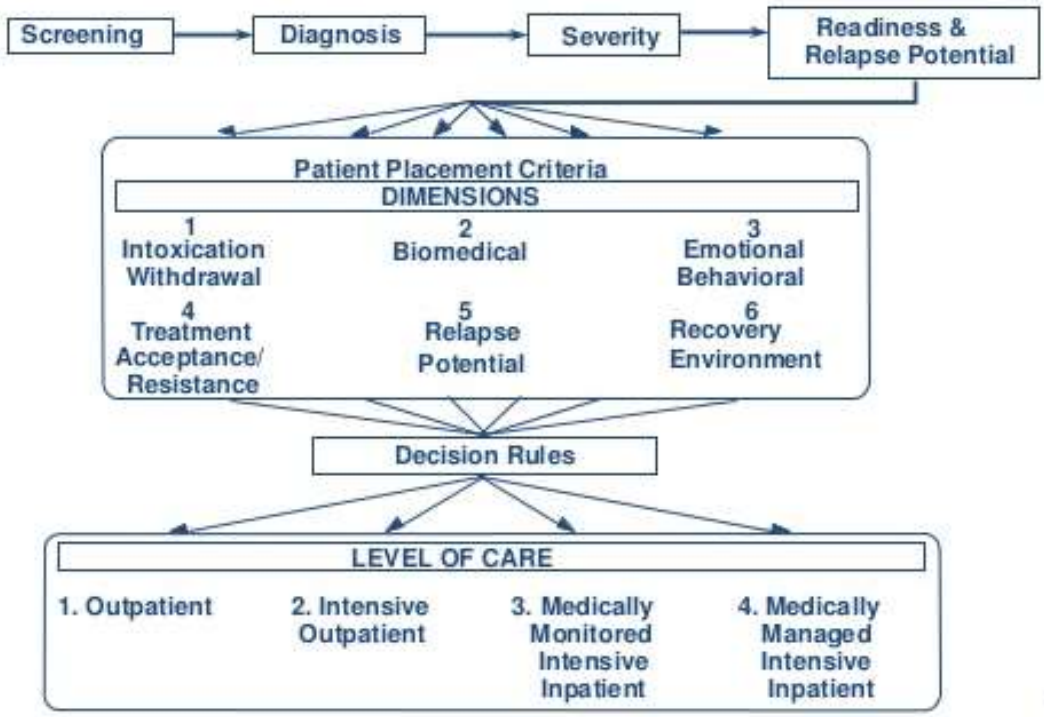
1. Acute intoxication and/or withdrawal potential
2. Biomedical conditions and complications
3. Emotional, behavioral, or cognitive conditions and complications
4. Readiness to change
5. Relapse, continued use, or continued problem potentials
6. Recovery/Living environment

The following chart describes the Placement Criteria recommended by ASAM to be used before recommending an appropriate level of care for a particular individual in need of treatment for substance use disorder.

[45] American Society of Addiction Medicine. (2013). The Six Dimensions of Multidimensional Assessment. The ASAM Criteria. Retrieved from http://asamcontinuum.org/knowledgebase/what-are-the-six-dimensions-of-the-asam-criteria/

[46] American Society of Addiction Medicine. (2013).

Figure 3: ASAM Patient Placement Criteria[47]



An assessment-based system ensures that each person's needs are assessed through an objective set of evidence-based criteria. Ideally, the individual will be assessed for all behavioral health disorders, including mental illness, and not just for their level of substance use disorder. This requires that the community have well-trained and highly skilled clinicians with state-of-the-art knowledge who can make accurate diagnostic decisions and treatment recommendations.

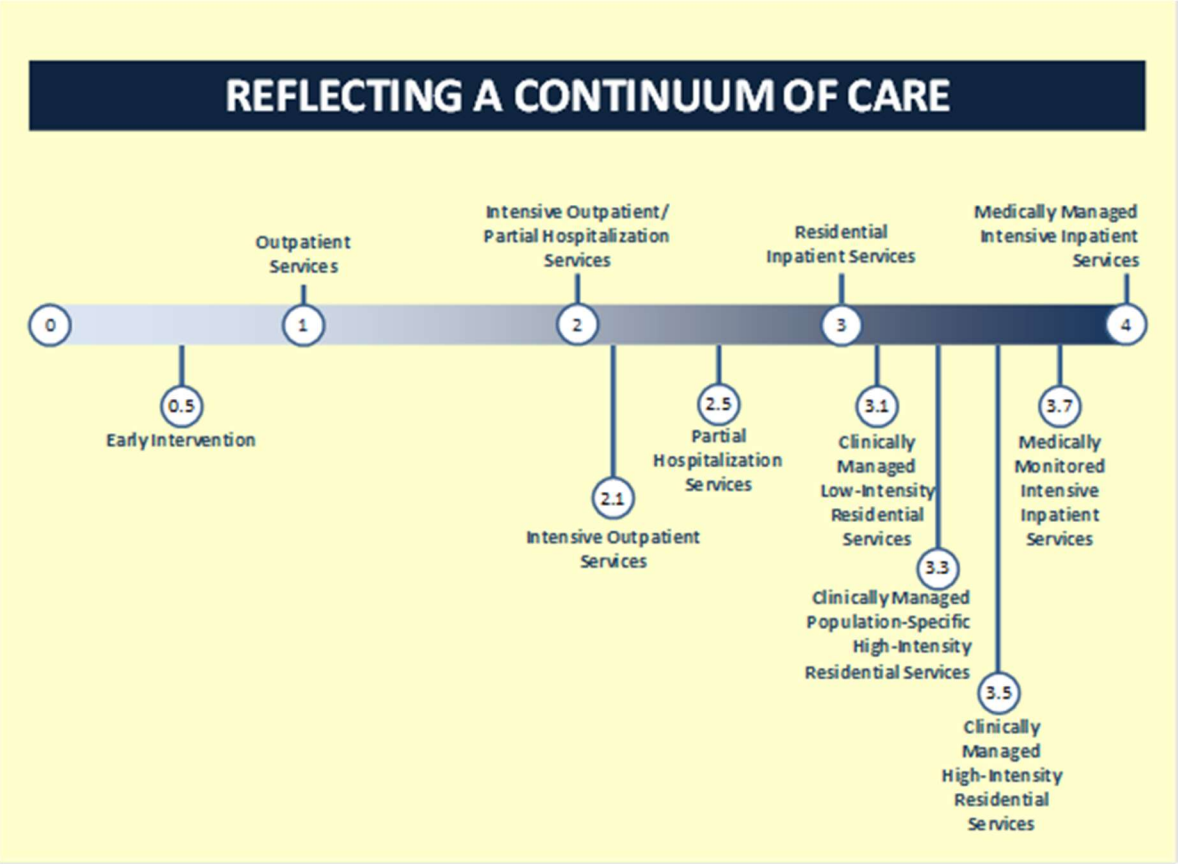
The ASAM Levels of Care for Treatment of Substance Use Disorders

The chart below illustrates ASAM's listing of the continuum of levels of care necessary in order to be able to refer a person to the level of care appropriate for their particular need. Services in the continuum range from the least intensive interventions on the left (Early Intervention, Outpatient, and Intensive Outpatient Services), to the most intensive interventions on the right (Partial Hospitalization, Residential, and Inpatient Services). When critically important service

[47] American Society of Addiction Medicine. (2013).

levels are missing, a community lacks the tools needed to give a person experiencing substance use disorder the best evidence-based chance of recovery.

Figure 4: The ASAM Continuum of Care[48]



It is important to note that, in addition to the levels of treatment, a full continuum of care also needs appropriate withdrawal management (detoxification) levels of service. Prior to placing a person in a treatment program, an individual may need a safe process and/or place that can help them through the detoxification process, help them understand their level of disorder and their options for treatment, and help them connect to the appropriate level of treatment. A medically-monitored or medically-managed level of withdrawal management has the added considerable benefit of being able to provide observed induction of medication-assisted treatment.

It is also important to note that SUD is considered a chronic disorder, and that over time, many individuals will need to be re-evaluated and placed in a different level of care. Like other chronic illnesses (asthma, diabetes, hypertension, etc.), ongoing evaluation and periodic modification of

[48] American Society of Addiction Medicine. (2013).

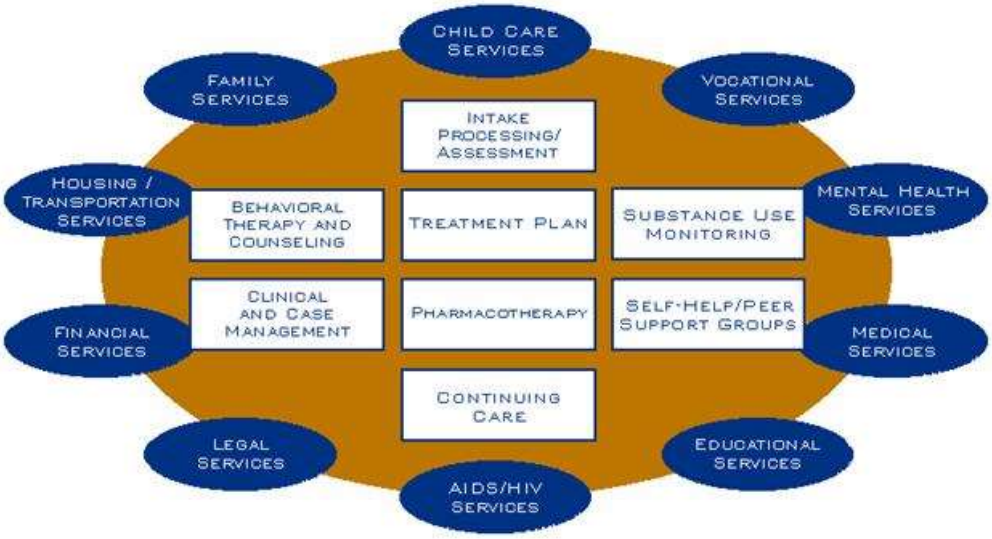
treatment services for substance use disorders based on individual need produces the best results.[49]

Components of Substance Use Disorder Treatment

The following chart illustrates the essential elements of effective treatment (listed in the center of the chart). The exact configuration of treatment, as with any disorder, will depend on the individual's particular circumstances. Different configurations of treatment are also considered to have varying levels of effectiveness. For example, for an individual with an opioid use disorder, there is evidence that indicates that the most effective treatment will include both medication-assisted treatment and counseling; the next most effective treatment includes medication-assisted treatment without counseling; and the third most effective treatment includes counseling without medication-assisted treatment. For other disorders, treatment may vary according to the substance(s) used and the individual's unique situation.

Depending on an individual's particular need, they may also need assistance linking to some of the support services surrounding the essential treatment services. The recommendations contained in this document do not seek to address the adequacy of *all* aspects of the treatment system, but instead focus on several critical areas that have been deemed the most important to address at this time; however, all elements described in the chart below need to be present in order for the system of care to be the *most* effective.

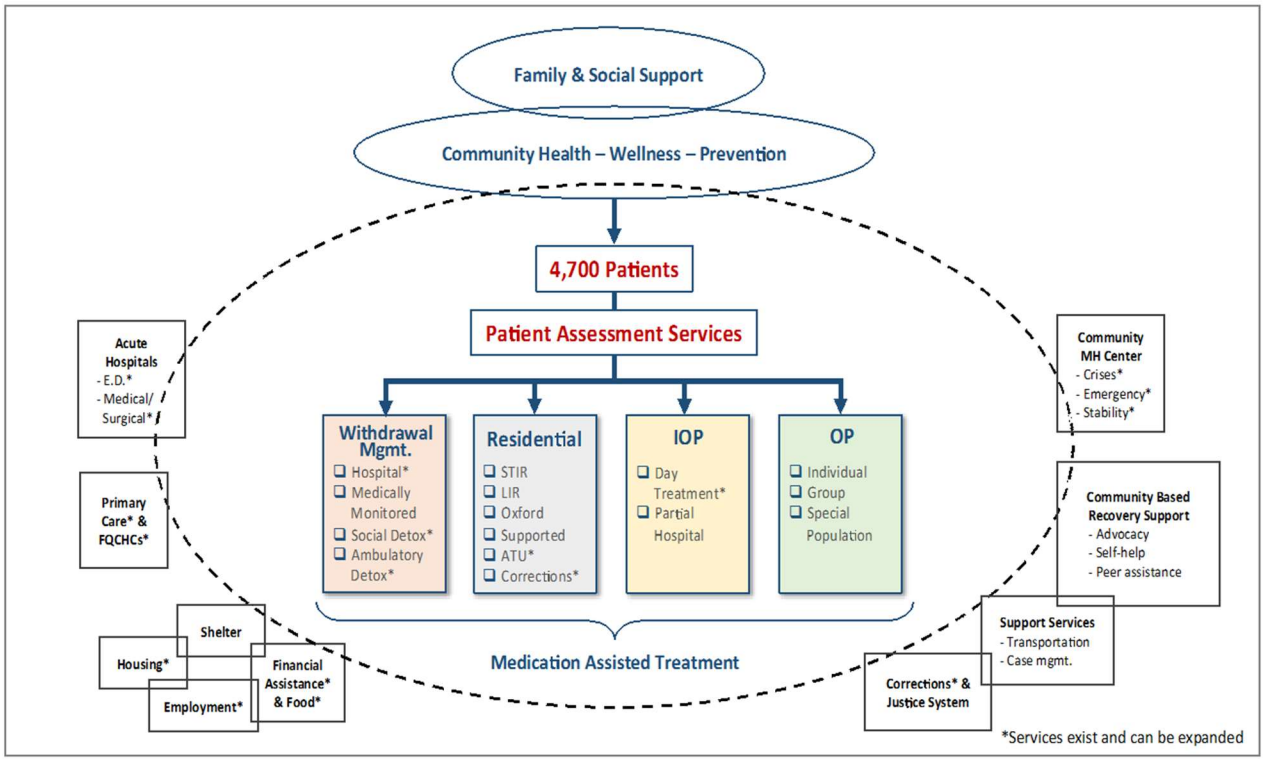
Figure 5: Components of Comprehensive Drug Abuse Treatment[50]



[49] National Institute on Drug Abuse. (2007). Components of Comprehensive Drug Treatment. Retrieved from http://www.drugabuse.gov/publications/teaching-packets/understanding-drug-abuse-addiction/section-iii/4-components-comprehensive-drug-addiction-treatm

[50] National Institute on Drug Abuse. (2007).

Similarly, according to NIATx's 2016 report, the following chart represents an Optimal Larimer County SUD Treatment System



Mapping Project: Process

The MHSU Alliance mapping project began with MHSU Alliance staff outlining existing local services as they relate to the ASAM levels of care framework. Utilizing the ASAM continuum of care framework (Figure 4), MHSU Alliance staff reviewed those treatment programs licensed by the Colorado Department of Human Services' (CDHS) Office of Behavioral Health (OBH) that are located in Larimer County or outside of the county, but frequently used by residents of Larimer County. Each licensed treatment provider was aligned with the level of care they provide. Staff then prioritized those organizations for interviews that serve the largest number of Larimer County residents, are most often referred by clinicians in the field, and represent all levels of care. A list of organizations interviewed is included in Appendix I.

In-person or phone interviews were then conducted in order to determine:

1. What services are available?
2. Are the services generally open to new clients or often full?
3. How much do services cost?
4. Do the services meet the basic standards for that level of care?

Upon completion of the interview process, staff compiled a matrix of existing community services compared to each of the ASAM levels of care previously determined to be necessary for

a complete community substance use treatment system. The Guidance Team then used this matrix to designate local services as adequate, near adequate, or in need of increased services. For those levels with a need for more services, the Guidance Team then identified key elements of each level of care in an ***ideal*** system, using literature from the field to help inform their work.

The Guidance Team then combined the results of this 2015 service mapping with previous work of the MHSU Alliance, ongoing feedback from the Interagency Group (a local group of service providers that meets regularly to reduce barriers to care for those with complex needs), and client interviews. This led to the Guidance Team reaching consensus on which services are critically needed in the community in order to achieve a more comprehensive system of care for people with substance use disorders.

In 2017, the data collected from the 2015 service mapping was updated by MHSU Alliance staff to reflect changes in community services since 2015, and the resulting information was used to update this report and the recommendations.

Analysis of Existing Levels of Care for Substance Use Disorders Available to Residents of Larimer County, Compared to ASAM Level of Care Continuum

Withdrawal Management (aka Alcohol and Drug Detoxification)

When an individual discontinues his/her use of alcohol or drugs, withdrawal management helps the person withdraw/detox as either an inpatient or outpatient by providing an environment that is safe, supportive, and when needed due to severity, medically supervised.

The levels of withdrawal management outlined by ASAM include:[51]

- Level 1-WM: **Ambulatory** withdrawal management without Extended On-Site Monitoring (e.g., physician's office, home health care agency). This level of care is an organized outpatient service monitored at predetermined intervals.
- Level 3.2-WM: **Clinically-Managed Residential** withdrawal management (e.g., nonmedical or social detoxification setting). This level emphasizes peer and social support and is intended for patients whose intoxication and/or withdrawal acuity is sufficient to warrant 24-hour support.
- Level 3.7-WM: **Medically-Monitored Inpatient** withdrawal management. Unlike Level III.2.D, this level provides 24-hour medically supervised detoxification services, which allows for monitoring and intervening in the unpredictable and potentially dangerous process of withdrawal from alcohol and other substances through evaluation and monitoring of existing medical conditions, monitoring and support for vital signs, and administration of medications to assist in the withdrawal process.
- Level 4-WM: **Medically-Managed Intensive Inpatient** Withdrawal management. This level provides 24-hour care in an acute care inpatient setting, such as an inpatient

[51] American Society of Addiction Medicine. (2014). *The ASAM Standards of Care for the Addiction Specialist Physician*. Chevy Chase, MD: Author

behavioral health hospital or a hospital, and is used when the existence of concomitant medical conditions require ongoing monitoring and intervention throughout the detoxification in order to ensure the safety of the patient.

Effectiveness of withdrawal management has the best chance when the individual receives timely care, at the right level of WM care for their situation, and when the withdrawal management service has the capacity to provide comprehensive assessment and referral/connection which results in successfully connecting the patient to the next appropriate level of treatment. Treatment close to the patient's home and support system, when possible, is important in order to encourage both support and continuation in treatment.

Local Situation

The majority of Larimer County individuals who go through supervised withdrawal management currently get their care from what is widely known as the "Detox Center" in Greeley, the closest regional "social" withdrawal management program to those living in Larimer County, located at NRBH in Weld County. The program is a Level 3.2, clinically managed residential withdrawal management program, also called "social detox". NRBH has 23 beds to serve the 12 counties in the Northeast region.

According to UCHealth's emergency departments (Poudre Valley Hospital, Medical Center of the Rockies, and the Harmony free-standing location), 591 individuals were transferred to the Weld County NRBH detox facility in 2016. Data was not available from McKee Medical Center in Loveland, the other emergency department in Larimer County. The average length of stay for individuals being served by the NRBH detox facility during this period was 2.8 days. The number of Larimer County residents being transferred to NRBH for detox services has declined significantly over the years due to transportation barriers and NRBH often operating at capacity of beds, leaving many residents to complete their detox in the local emergency departments.

If the individual is experiencing the need for inpatient hospitalization, they can be admitted to Mountain Crest Behavioral Health Center, the inpatient behavioral health hospital in Fort Collins run by UCHealth, for *medically managed intensive inpatient withdrawal management*. Mountain Crest recently expanded their beds by eight, from 26 to 34, now including seven adult inpatient beds, 14 nursing intensive psychiatric beds, five acute inpatient psychiatric beds, and eight adolescent beds. These beds can be used flexibly to meet overflow needs, and all 34 beds can be used for medically-managed withdrawal management as needed.

Clear View Behavioral Health opened a psychiatric hospital in Johnstown in 2016, which offers medically-managed withdrawal management and SUD treatment. Clear View has a contract with the VA to provide these services for local veterans. Clear View also accepts Medicaid.

Harmony Foundation, in Estes Park, also provides medically-monitored withdrawal management, particularly for those entering their treatment program, and for those with a payer source other than Medicaid (generally either insurance or private funds). Harmony Foundation recently expanded their beds from seven to 23.

North Range Behavioral Health Detox (NRBH) in Greeley, Mountain Crest Behavioral Health, and Clearview Behavioral Health accept Medicaid for detoxification services. NRBH reports that Medicaid covers only about 50% of the cost for an individual in social detox.[52] One reason for this is that Medicaid does not cover medically-monitored inpatient detox or detox that occurs in a residential treatment facility; it only covers social model detox or detox that occurs in a hospital on a medical or psychiatric unit.

When the withdrawal management services are full locally, people sometimes must travel to the next nearest facility, located in Denver, Boulder, and Louisville. Centennial Peaks Hospital in Louisville provides an inpatient medically managed withdrawal management option with 16 dedicated beds in the chemical dependency unit. Medicaid does not cover the services provided by Centennial Peaks, and Medicaid patients must be referred to the facility through a community health center or emergency department. Mental Health Partners in Boulder has a social detox with 20 beds and does accept Medicaid and offer a sliding scale for self-pay clients.

Challenges to Receiving Appropriate, Local Withdrawal Management Services

This review of services revealed that there are multiple, serious challenges for individuals who reside in Larimer County that need withdrawal management, as well as for the providers and services that attempt to refer them into withdrawal management. Although there is adequate capacity for medically-managed withdrawal management at the inpatient hospital level of care (which costs over 10 times the amount of social detox), **there are no licensed facilities offering either social or medically-monitored withdrawal management services that are open to all residents regardless of ability to pay in Fort Collins or Loveland.**

When an individual is in need of a safe environment to detox, it can take significant time to get to a facility that provides withdrawal management. Challenges are regularly experienced, particularly when facilities are full, or transportation is not available. Often, the individual receives services in a location outside of their community, making it difficult to make a seamless connection to the next level of treatment.

Because of the difficulty of getting people into an appropriate withdrawal management program in a timely manner, it appears that increasingly, many people are simply held at the emergency department or in jail long enough to become functional again (not necessarily fully sober), and are then released. These are high cost, inefficient, and usually inappropriate settings for detox to occur. They do not have the staffing or training to specialize in effective withdrawal management, and they have limited resources, if any, for effectively connecting individuals into appropriate treatment. See page 56 for a visual representation of potential diversion opportunities from these community services into new proposed services related to this report. The process and challenges are discussed in more detail below.

[52] K. Collins (personal communication, March 13, 2015)

Impact on Hospitals

In Larimer County, when an individual is intoxicated or experiencing withdrawal, typically they will first be brought to an emergency department. Based on national rates of emergency department visits with a first-listed alcohol-related diagnosis, Larimer County emergency departments are seeing approximately 2,000 of these types of visits annually[53], which is slightly lower but similar to what local UCHealth emergency department data (approx. 2,500) is reporting for these types of visits annually. It is also important to note that these rates of emergency department visits do not include visits with a first-listed drug-related diagnosis and only account for alcohol-related diagnoses, so the rate of both alcohol and drug-related visits is likely higher. The Nationwide Emergency Department Sample (NEDS) data also tracks the rates of visits with a first-listed mental health or substance abuse related diagnosis and reported a 76% increase in alcohol-related disorders from 2006 to 2014, and a 74% increase of substance-related disorders during the same time period.[54] Compared to emergency department diagnosis categories (injury, medical, mental health/substance use, and maternal/neonatal) between 2006 and 2014, mental health/substance use was the only category that had no diagnoses decrease during that time period.

Individuals treated in UCHealth emergency rooms at the Poudre Valley Hospital, Medical Center of the Rockies, or the UCHealth Emergency Room on Harmony Road in Fort Collins are assessed by a team member from the Crisis Assessment Center (CAC). The CAC is operated by UCHealth's Behavioral Health Services team supervised by the Mountain Crest Behavioral Health Center.

The CAC staff members perform mental health and substance use assessments and work to streamline transitions to appropriate treatment for people in mental health and substance use crises. Once it is determined that the individual requires withdrawal management services, CAC staff obtain medical clearance and begin the process of locating a bed, which is most often found at either NRBH in Greeley or, if the need is for inpatient hospitalization, Mountain Crest Behavioral Health Center. This process could take from about two hours to up to five hours or more to complete.

Currently, because facilities are often at capacity or because transportation to the NRBH detox in Greeley is difficult, patients are often retained in the emergency department until their intoxication level lowers to a level judged acceptable by staff. Individuals are then released back into the community, typically without connection to comprehensive withdrawal management or treatment services.

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[53] National Institutes of Health. National Institute on Alcohol Abuse and Alcoholism. (2013). Alcohol-related emergency department visits and hospitalizations and their co-occurring drug-related, mental health, and injury conditions in the united states: findings form the 2006-2010 nationwide emergency department sample (NEDS) and nationwide inpatient sample (NIS). Retrieved from https://pubs.niaaa.nih.gov/publications/NEDS&NIS-DRM9/NEDS&NIS-DRM9.pdf

[54] Moore, B., Stocks, C., & Owens, P. (2017). Trends in Emergency Department Visits, 2006-2014. Agency for Healthcare Research and Quality. Retrieved from https://www.hcup-us.ahrq.gov/reports/statbriefs/sb227-Emergency-Department-Visit-Trends.pdf

From the beginning of 2015 through October 2015, the CAC at Poudre Valley Hospital reported that NRBH refused admission to detox services nearly 500 times. Reasons for refusals vary, but most often include the following: the center is full, there are insufficient staff members to cover all the beds, there are not any beds for the gender of the individual needing services, or there is no timely transportation available. (NRBH is contracted to provide transportation for patients from the PVH CAC but sometimes has staffing shortages.)

In Southern Larimer County, individuals who are not taken to the Medical Center of the Rockies are taken to the emergency room at McKee Medical Center. Staff at McKee Medical Center work directly with NRBH to appropriately place individuals in need of their services. Data is currently not available on how many individuals are currently admitted to these emergency rooms for detoxification services.

Impact on Criminal Justice

Larimer County Jail data from 2016 shows that approximately 60 were brought to the jail for detox without any pending criminal charges, because the emergency departments and Weld County's detox was full.[55] This places a significant burden on law enforcement and jail staff, as they lack the resources, training, and time to appropriately and safely manage these individuals.

In addition to a need for those individuals that are detoxing in the jail, there were other criminal justice populations identified throughout this process that would also benefit from the addition of social or medically-monitored withdrawal management services within Larimer County. The County's Community Corrections and Work Release Departments often have individuals within their programs who could benefit from these services. Currently, if an individual reports to Work Release intoxicated they are either turned away and told to obtain a new admission date or they are admitted into the program and go through detox in the facility, but without proper medical care or staffing to supervise the detox process. Work Release staff reported that many of these individuals acknowledge that they will not be able to successfully detox on their own in the community before reporting to the program, which results in them reporting back to the program intoxicated multiple times until they are eventually revoked back to the jail for non-compliance. Community Corrections also has individuals that report to their treatment or residential programs intoxicated that could benefit from dedicated withdrawal management services in the community. This would be a great benefit for both the staff and the clients as it would allow individuals to receive proper withdrawal management care, rather than individuals having to detox in a criminal justice setting without appropriately trained staff.

The Challenge of Medical Needs

In Larimer County, the sheer numbers of individuals currently detoxifying on the street, in shelters, jail, and/or the emergency department, indicates a need to expand the original focus on medically-monitored detox in 2016 to include the flexibility to provide a range of

[55] S. Prevost (personal communication, November 20, 2017)

detoxification services that meet the needs of a wide variety of community members. Providing both clinically managed (social) and medically-monitored detox options will create the ability to determine the level of a person's detoxification process based on their individual and often changing needs over time.

As the NRBH facility is licensed as a social detox, its funding mechanism does not cover staff who are licensed and trained at the level that would be needed for medical monitoring or management. Individuals who present directly to the detox or who are dropped off by law enforcement don't always receive medical clearance, but when individuals are transferred to the detox after first presenting to an emergency department (as is usually the case for Larimer County residents), NRBH typically asks that they are cleared for social detox before completing the transfer.

Because the NRBH detox facility does not currently have medical personnel, individuals may be transferred to the emergency room at Northern Colorado Medical Center in Greeley if they (1) become non-responsive and need medical attention; (2) become too aggressive for detox staff to handle; or (3) have withdrawal symptoms so severe that they require medication. In the case of this third scenario, the individual will be transferred to the emergency room for medication management and then be returned to the NRBH detox facility. To avoid many of these transfers, NRBH staff reported in 2015 that they were investigating options to provide some of this medical care on-site, and in 2017 NRBH was actively working to develop medically-monitored service capability, and the quote below from a NRBH report echoes the recommendations being made in this report for Larimer County:

> "Our hope and dream continues to be to determine a funding mechanism to fund 24/7 nursing coverage for our detox facility. In addition, we need medical oversight and physician rounding at least several hours per day. While a fairly costly enterprise, we believe that it would have significant impacts on ER utilization (in both counties) as well as increase our ability to manage medically or psychiatrically complex clients."[56]

There is a significant difference between a detox center that can utilize medical intervention and a social detox center. According to the Treatment Improvement Protocol (TIP) 45, *Detoxification and Substance Abuse Treatment*, "Social detoxification is preferable to detoxification in unsupervised settings such as the street, shelters, or jails." However, social detoxification is not the recommended standalone standard of care:

> "The management of an individual in alcohol withdrawal without medication is a difficult matter because the indications for this have not been established firmly through scientific studies or any evidence-based methods. Furthermore, the course of alcohol withdrawal is unpredictable and currently available techniques of

[56] *North Range Behavioral Health, Health and Human Services Community Partnership Program report for January 1-June 30, 2015* (Rep.). (n.d.).

> screening and assessment do not allow us to predict with confidence who will or will not experience life-threatening complications."[57]

Importantly, many individuals, particularly those who with dependence on opioids, will benefit most from starting appropriate medical treatment at just the right point during their detoxification, and that treatment cannot begin in a social detox facility. However, that treatment can begin in a facility providing medically-monitored detoxification beds.

Some, like those currently spending approximately five hours in the Emergency department at a hospital to detox enough to be released, may utilize social detox initially; however, the specific focus of staff and programming on detoxification, and also in relationship and trust building, may result in longer stays with greater levels of detoxification, as well as better engagement in treatment over time. The ability to provide more intensive detoxification, and the ability to begin induction on medication-assisted treatment in medically-monitored detox beds, provides a key opportunity to address the current revolving door of individuals using high cost services such as emergency departments and the jail for detox.

The Challenge of Receiving Care Far From Home

Currently most Larimer County community members receiving withdrawal management must be transported to Weld County for detoxification services. This results in the need for expensive transportation and reduced efficiencies in getting people to timely detox services. It also creates burdens on Emergency departments while patients are waiting for transportation. Additionally, this also creates limitations on appropriate aftercare, follow-up, and involvement of family members in treatment processes.

Summary of Withdrawal Management Service Gaps

- The only withdrawal management beds available in Larimer County are hospital based medically managed beds, which, though needed for some, are far more expensive than needed for most individuals needing detoxification.
- The majority of Larimer County individuals receiving detoxification must be sent to Weld County (NRBH).
- Services available at NRBH are limited to social model detox. Medically-monitored withdrawal management is now considered the best practice for a large proportion of those in need of withdrawal management care.
- Both social and medically-monitored beds are needed to be able to meet the full spectrum of withdrawal management needs in Larimer County.
- Currently, without local withdrawal management beds, and with both geographic and capacity issues impacting the ability to utilize NRBH detoxification services, many Larimer County individuals are being "detoxed" in emergency rooms and in the jails, or remain on the street to detox.

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[57] *KAP keys for clinicians based on TIP 45, detoxification and substance abuse treatment*. (2006). Rockville, MD?: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.

- Transportation to Weld County for detox is inefficient and expensive.
- Utilization of non-local detoxification services limits appropriate aftercare, follow-up, and involvement of family members.

Residential Treatment for Substance Use Disorders

One of the levels of care on the ASAM Continuum that is largely missing from Larimer County is Clinically Managed Residential Services. Residential treatment is indicated for individuals deemed to specifically need care outside their normal living arrangement in order to bring a serious disorder under control and teach the individual how to manage it in the future. Treatment is provided in a highly structured setting within specialty substance use disorder treatment facilities or facilities with a broader behavioral health focus, and can range from short term stays of 14 days to longer-term stays up to 6-12 months, though the longer stays are unusual. Good outcomes are generally contingent on adequate treatment length. Research by the Center for Substance Abuse Treatment (CSAT) has shown that length of stay is positively related to treatment outcomes and that increasing lengths of stay improve treatment outcomes. For residential or outpatient treatment, participation for less than 90 days has been found to be of limited or no effectiveness, and treatments lasting significantly longer are often indicated.[58] Currently, substance abuse providers generally appear to interpret the data to mean that a combination of treatment methodologies for at least 90 days (which could, for example, include residential, intensive outpatient, and outpatient services) would meet that 90-day minimum.

Residential treatment is distinguishable from inpatient treatment services, which take place within specialized units in hospitals, and are more geared toward stabilization. Residential treatment services are currently considered to have the best chance of success when the client is able to receive services in the community in which she/he will live upon completion of treatment. Sending individuals across the state can alienate the family and support system from the treatment process rather than including them, and can create more struggles when transitioning back into the community.

One of the greatest barriers to receiving residential services is the cost of care. Medicaid, which provides at least partial funding for many levels of care, does not pay for residential treatment in any setting, although single case agreements have been approved on an infrequent basis.[59] Private pay residential treatment services charge $20,000 or more for a 28-day program. This can be very cost prohibitive for individuals and families; however, individuals who have the means to pay can typically get into treatment the same day they seek services.

Most often, Larimer County residents must leave their community to gain access to affordable residential treatment. For those individuals who do not have the means to pay, there are some programs in Colorado that have other funding mechanisms that help make this level of care more affordable but those are very limited, impact few people, and have waiting lists that are weeks to months long. For example, residents of Larimer County who do not have significant monetary resources and need residential care most often go to the Transitional Residential Treatment

[58] Substance Abuse Program Administrators Association. (n.d.). Treatment. Retrieved from http://www.sapaa.com/page/wp_sa_treatment
[59] K.Collins (personal communication, 2017)

(TRT) program run by NRBH in Greeley, which has 20 beds. This program has other funding that reduces the average daily charge to $230/day, far less than the $600 to $800 or more daily charges of other treatment options, as well as a sliding fee scale based on income that can further reduce the daily rate to around $40.

From January 1, 2016 through December 31, 2016, only 45 Larimer County residents were able to access this service. North Range often has a waiting list of two to six weeks for admission to residential treatment unless the client fits into one of the block grant priority populations (pregnant women, IV drug users, or women with dependent children). As part of the program, clients are encouraged and supported in seeking employment. Once employed, they are encouraged but not required to pay a certain percentage of their income to help support the cost of their treatment.

For residential treatment outside of the region, a small number of Larimer County residents have accessed the Intensive Residential Program (IRT) at Arapahoe House in the Denver area, Colorado's largest provider of addiction treatment. However, Arapahoe House ceased operations in January of 2018. Efforts are underway to fill the resulting gap in treatment through other organizations and options; therefore, it is unknown how access will be impacted for Larimer County residents.

The largest provider of residential SUD services in Larimer County is Larimer County Community Corrections (LCCC). However, the ability to access these services is limited to those involved in the criminal justice system. In 2016, at least 430 individuals received residential SUD treatment through LCCC, and another 25 individuals completed intakes but left prior to initiating treatment.[60]

For those who have significant monetary resources, there are other options, both inside and outside of Larimer County, for licensed residential SUD care. Within Larimer County, Harmony Foundation in Estes Park is a licensed provider, as is Narconon in Fort Collins. Inner Balance, Harvest Farm, and AspenRidge Recovery provide sober living environments and partial hospitalization and intensive outpatient programs for residents, but are not licensed to provide residential treatment.

Other licensed providers outside the community include the Veterans Hospital in Cheyenne whose catchment area includes Larimer County, Centennial Peaks Psychiatric Hospital in Louisville, Mental Health Partners in Boulder, and the Stout Street Foundation in the Denver metro area, but they serve few Larimer County residents. Stout Street does not charge clients for the services; their program is a work-based program where individuals are connected with employment during their stay in the program. A portion of their earnings go toward their treatment costs, while another portion of their earnings go toward individual savings plans to develop a financial foundation upon completion of this level of care.

[60] M. Ruttenberg (personal communication, August 2, 2017)

Other levels of residential care include Low Intensity Residential (LIR) (aka halfway house) services (ASAM 3.1), which are designed to build and reinforce a stable routine for residents in a safe and supportive context. Program components include education, group counseling/support by certified personnel, orientation to employment, and employment in preparation to community reintegration. LIR houses are appropriate for residents who lack a stable living environment, and other social supports. No LIR houses currently exist in Larimer County.

Independent, voluntary sober housing, like "Oxford Houses" represent safe and supportive living environments for those who choose and can pay for this type of residence. There are currently three Oxford Houses in Larimer County with a total capacity of 22 beds.

Finally, for those with chronic behavioral or somatic health conditions, who lack family/social supports, and are disconnected from employment and other community functions, supported housing is an effective and cost efficient resource to house people with chronic and severe mental health, substance use disorders, or dual diagnoses, long term disabilities, and other traditionally high users of health and social support services. A permanent supportive housing facility with 60 units exists in Larimer County and another facility is being planned; however, it is estimated by Housing Catalyst that three facilities are needed in order to meet the needs in our community. Additionally, while funding for facility construction is available, lack of funding for the supportive services indicated by the model is often the limiting factor that reduces the feasibility of creating additional permanent supportive housing projects.

The chart on the following page illustrates the residential care options that appear to be most often used by Larimer County residents, and gives a sense of length of stay and cost.

Figure 6: Licensed SUD Residential Providers Most Used by Larimer County Residents

Organization	Length of Stay	Payment (Medicaid does not cover residential treatment)			Waiting List
	90-Day Standard	Insurance	Dept. of Corrections	Self-pay cost	How long?
North Range Behavioral Health (Greeley) Level of care: TRT	35 day average	X		$230/day with sliding fee option (down to $40/day)	2-6 weeks; Always have a wait list
Larimer Co Community Corrections (Fort Collins) Level of care: IRT (Men's & Women's)	Up to 90 days		X	$0	45-90 days
Larimer Co Community Corrections (Fort Collins) Level of care: STIRRT	3 weeks residential with 9 months weekly outpatient		X	$0	Intakes every third Tuesday
Harmony Foundation, Inc. (Estes Park) Level of care: IRT	28 Days	X		$26,000	Same Day
Narconon Colorado (Fort Collins) Level of care: TRT	Avg. 4 mos.	X		$30,000	Same Day

The development of affordable local residential SUD care is considered a critically needed behavioral health service. It is vitally important that once a person is willing to participate fully in their treatment, the treatment be quickly available and that cost not be a barrier to care. Time is of the essence when an individual reaches out for treatment services: "Longer waits for treatment increase the opportunities that other events will arise, thereby further interfering with treatment entry."[61] Further, the best care will involve the family or support system, and that is best done when the treatment is provided locally. Some of the pinnacles of substance use disorder treatment include starting as early in the disorder as possible, and engaging the family and other natural supports in the treatment process.[62] When an individual has to leave his/her community to access services, family participation can be hindered.

[61] Redko, C., Rapp, R. C., & Carlson, R. G. (2006). Waiting Time as a Barrier to Treatment Entry: Perceptions of Substance Users. *Journal of Drug Issues*, *36*(4), 831–852.

[62] Werner, D., Young, N.K., Dennis, K, & Amatetti, S.. (2007). *Family-Centered Treatment for Women with Substance Use Disorders – History, Key Elements and Challenges*. Rockville, MD: Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Summary of Residential Treatment Service Gaps

- Larimer County does not have local short-term residential treatment beds even though this is a key level of the ASAM continuum of care for substance use disorders.
- Those needing residential treatment must go outside of the community to receive care and very few individuals actually do this.
- Even when care is available outside of the community, access to this care is limited by wait lists and affordability.
- Family involvement and continuity of care in the local community is limited when non-local residential treatment services are utilized.
- Low Intensity Residential (LIR) (aka halfway house) services are not currently available in Larimer County.
- Independent, voluntary sober housing, like "Oxford Houses" are not currently available in Larimer County.
- Funding for the "supportive services" which include treatment for mental illness and substance use disorders among other services is often a limiting factor that reduces the feasibility of creating additional permanent supportive housing projects.

Intensive Outpatient Treatment Programs (IOP)

Intensive Outpatient Treatment Programs (IOP) are another vital pillar of the continuum, as IOP serves a level of care appropriate for individuals requiring more than standard outpatient treatment. IOP is defined as nine or more hours (fewer than 20 hours) of structured counseling and educational services per week. In these programs, individuals attend very intensive and regular treatment sessions multiple times a week early in their treatment for an initial period.

Individuals in IOP can secure and/or maintain employment, as well as address other aspects of their life in need of attention while remaining engaged in treatment. IOP services can be used for a variety of purposes: as an entry point into treatment for individuals assessed for that level of care; as a step-up option from regular outpatient treatment for clients in the event their condition worsens; or as a step-down from an inpatient or residential program. After completing intensive outpatient treatment, individuals often step down into regular outpatient treatment, which meets less frequently and for fewer hours per week, to help sustain their recovery.

Until 2015, Larimer County was entirely missing this critically important level of care. Due to a decision by Colorado Medicaid to cover IOP, Larimer County now has several organizations offering IOP services, shown in the chart below.

Figure 7: Chemical Dependency Intensive Outpatient Programs (IOP) in Larimer County

Organization	Length of Stay	Number of Groups/Slots	Payment			Cost
	90-Day Standard 12-13 weeks		Medicaid	Insurance	Self-Pay Cost	
SummitStone Health Partners (Fort Collins)	90 Days	Three, 3-hour groups per week plus an individual appointment/12 slots per group	X	X	Self-pay is based on a sliding scale	
Mountain Crest/PVHS (Fort Collins)	7 weeks	Two groups/12 slots per group	X	X	$350/visit	$6,452 for whole program
Harmony Foundation (Estes Park)	28 days	One group/up to 12 slots reserved for people in their transition of care program		X		
Inner Balance (Loveland)	28 days	Unknown		X		$10,000
Clear View Behavioral Health (Johnstown)	No limitation	5 groups, up to 10 per group	X	X		
AspenRidge Recovery (Fort Collins)	13 weeks	One group/12 slots per group		X		
		Total of 135 slots currently available				

It is not known whether existing services are capable of meeting the current needs for IOP.

Projections related to this update report show that 1,000 IOP admissions will be necessary to meet the needs of those individuals being served through a facility offering many of the services being recommended and this would not be able to be met with current capacity. It is obvious that the current total of 135 IOP treatment slots at any one time will not be sufficient to meet that need. However, due to insurance reimbursement for this level of care, it is hoped that additional capacity for IOP can be developed in the community to support the growing need.

One of the biggest remaining challenges to individuals needing IOP services can be for those who do not have insurance, do not have insurance that covers this care, or who have insurance

but who must still meet deductibles and copays. For instance, Medicare does not cover IOP treatment, so in order to receive care, clients must either be placed in partial hospitalization treatment or attend multiple outpatient treatment groups. Another key challenge is that since there are still few IOP services offered, there are not many options for when a person can attend, which can be difficult for people to balance with work obligations. Finally, best practices indicate that population-specific IOP groups, for example, groups based on gender, can be more effective than open groups; but the services have not grown in this community to the extent to be able to offer those yet.

Veterans can also access IOP at the Cheyenne facility, which has no waiting list, although the distance is a barrier. Program length and cost vary according to the individual's situation. Staff report that the local veterans services are attempting to establish services in Fort Collins.

Summary of Gaps in Intensive Outpatient Treatment

- While current IOP options are growing in Larimer County, it is unknown whether existing options are meeting the current need for this level of care.
- The existing IOP slots available would not be sufficient to meet the projected need for 1,000 IOP admissions related to increased engagement in treatment of those individuals who might be engaged through local detoxification and other proposed services. However, the fact that reimbursement is now available for IOP services indicates the potential for expanding these services to meet this need.
- Clients needing IOP services often cannot afford them due to not having insurance, insurance plans not covering IOP, or having high deductibles and copays.
- Currently, while IOP options are growing in the community, there is a still a need for a wider range of options for IOP services at different times and locations to accommodate client life obligations and work schedules.
- Best practice approaches such as gender or population specific IOP groups are recommended to be developed.
- There are still some uninsured individuals and underinsured individuals who have insurance plans with high deductibles and copays that limit their ability to afford intensive outpatient treatment.

Medication-Assisted Treatment Services

"Medication-Assisted Treatment (MAT) is the use of medications in combination with counseling and behavioral therapies for the treatment of substance use disorders. A combination of medication and behavioral therapies is effective in the treatment of substance use disorders, and can help some people to sustain recovery."[63]

Medications used to treat opioid use disorder include naltrexone (brand name Vivitrol), Buprenorphine (common brand names Suboxone and Probuphine), and Methadone. These can be delivered in an outpatient setting, although different restrictions apply for each medication.

[63] SAMHSA: https://www.integration.samhsa.gov/clinical-practice/mat/mat-overview

Methadone has been used for decades but must be administered in a highly structured clinic that is certified as an opioid treatment program (OTP) by SAMHSA. Naltrexone is most often used as an extended-release injectable administered monthly, and can be prescribed and administered by any healthcare provider who is licensed to prescribe medications.

Local Availability of Medication-Assisted Treatment

Local availability of medication-assisted treatment has greatly expanded in the past few years, and continues to become increasingly accessible to patients as more locations open, providers expand their caseloads, and options for sliding scale and Medicaid payments are accepted. There are several clinics that now offer medication-assisted treatment in Larimer County.

Suboxone is available through programs at SummitStone Health Partners, Sunrise Community Health, the Colorado Clinic, Front Range Clinic, and certain other providers in primary care. Family Medicine Center and the Salud Clinic offer Suboxone programs to patients of their primary care clinics, and Colorado State University offers all forms of medication-assisted treatment to enrolled students who are in need of those services. Behavioral Health Group is a certified opioid treatment program and offers both Methadone and Suboxone.

Vivitrol is now available locally to patients at the following clinics, all of which take Medicaid except for Aspen Ridge North:

- Front Range Clinics
- Aspen Ridge North
- Clear View Behavioral Health (for detox patients)
- SummitStone (and Sunrise Clinic via SummitStone)
- Harmony Foundation
- North Range Behavioral Health (took on many 1st Alliance clients so some of our Larimer people likely ended up with them)
- Cheyenne VA Hospital
- Colorado State University (students only)

A number of private physicians offer medication-assisted treatment in one form or another, and that number is increasing over time. For a list of providers offering medication-assisted treatment, see Appendix J.

Summary of Gaps in Medication-Assisted Treatment

- While access to medication-assisted treatment is improving in Larimer County, there are still challenges and barriers. Even with increased capacity for medication-assisted treatment, as the number of people with opioid use disorders grows, capacity will need to expand to meet the need.
- Limits on the number of individuals who can be served by each practitioner currently impact capacity, as does provider understanding of medication-assisted treatment and willingness to be involved with this type of treatment.

- Patients on medication-assisted treatment often have a variety of complex needs that require moderate to intensive care coordination that is limited in the community. For instance, even on medication-assisted treatment, a patient's acuity of needs can vary widely over time, requiring the need to navigate to different levels of care, some of which don't exist and others that may not allow continuation on medication-assisted treatment.
- For those on medication-assisted treatment, attitudes towards medications that reduce cravings for opioids and alcohol often impact policies and procedures that either do not allow for prescription of medication-assisted treatment in certain settings (such as residential treatment or criminal justice), or require cessation of medication-assisted treatment while in that setting.
- Some forms of medication-assisted treatment with proven effectiveness may not be prescribed due to higher associated costs, and may not be affordable to those who are uninsured, underinsured, or have insurance plans that don't cover specific forms of medication-assisted treatment.
- There are still some uninsured individuals and underinsured individuals who have insurance plans with high deductibles and copays that limit their ability to afford medication-assisted treatment.

Outpatient Treatment Services

Since outpatient services are a key part of the continuum of treatment services in any behavioral health treatment system, outpatient services were also examined in order to assess what currently exists in Larimer County.

The vast majority of substance use disorder (SUD) treatment services available to Larimer County residents fall within the outpatient category on the continuum. There are several organizations in the County providing SUD outpatient services. For instance, SummitStone Health Partners has 28 Full Time Equivalents (FTE) dedicated to outpatient services. Other organizations offering outpatient SUD services include Mountain Crest Behavioral Health, HalfMoon Resources, Heart-Centered Counseling, and A New Perspective.

In addition to general SUD outpatient services for the general population, there are outpatient treatment services available both individually and in groups for those with co-occurring mental illness and substance use disorders (through SummitStone, the HUB for those with an open Child Protection case, and the Assertive Community Treatment/Community Dual Disorder Treatment Team). There is also one SUD clinician in Fort Collins providing outpatient treatment for veterans; and there is a program offering SUD services for court-ordered domestic violence clients. Additionally, SUD treatment is available for some people involved in the criminal justice system through Alternatives to Incarceration for Individuals with Mental Health Needs (AIMM), the Wellness Court, and the Residential Dual Disorder Treatment (RDDT) program.

Over 70 private mental health providers list having a Certified Addiction Counselor (CAC) or Licensed Addictions Counselor (LAC) qualification or list substance use counseling as one of their specialties on the Larimer County referral website www.HealthInfoSource.com. However, these are independent practitioners for whom payer sources, actual availability, and connection

to other parts of the treatment system is unknown, thus it is difficult to determine the capacity of these providers for filling the need for outpatient substance use disorder treatment.

There is anecdotal evidence that organizations are having some difficulty in hiring licensed behavioral health clinicians, and this may also include those who are certified or licensed to specialize in the treatment of substance use disorders.

Finally, there are about 15 organizations providing Driving Under the Influence (DUI) services, but these services are psychoeducational in nature and are not considered outpatient treatment.

A recent change that has made a difference for those who have low incomes and are in need of outpatient treatment for substance use disorders was the 2014 expansion of Medicaid to adults with low incomes. Since Medicaid provides medically-necessary outpatient services for its clients, there is a payer source that was not previously available, which has resulted in the expansion of outpatient services and provides likelihood that outpatient services can expand even more to better meet local need.

There are still some uninsured individuals and underinsured individuals who have insurance plans with high deductibles and copays that limit their ability to afford outpatient treatment.

Summary of Gaps in Outpatient Treatment

- It is unknown whether existing options for outpatient treatment are meeting the current need for this level of care.
- It is likely that existing capacity for outpatient treatment would need to increase in order to meet the projected need for about 6,000 outpatient admissions related to increased engagement in treatment of those individuals who might be engaged through local detoxification and other proposed services. However, the fact that there are payor sources for outpatient treatment indicates the potential for expanding these services to meet this need.
- Local workforce capacity, especially for licensed providers, may hamper the expansion of outpatient services.
- There are still some uninsured individuals and underinsured individuals who have insurance plans with high deductibles and copays that limit their ability to afford outpatient treatment.
- Care coordination for individuals with complex needs who are receiving outpatient treatment and who need to access other services in the community is available for some, but many need this type of assistance and cannot access it.

Existing Capacity of Critical Treatment Services for Mental Illness in Larimer County

While a wide range of services focused specifically on the treatment of mental illness are important in a behavioral health treatment system, recommendations in the 2016 report focused primarily on one key level of treatment known to be needed in Larimer County – the Acute Treatment Unit (ATU) level of care. In 2018, with the development of a Crisis Stabilization Unit (CSU) in Larimer County in 2015, it is believed that the care provided by an ATU is now available through the CSU. However, the continuum of care would work best if the CSU were

located on site with withdrawal management services and residential treatment options for SUDs, for reasons described below.

A summary of both ATU and CSU levels of care is provided below.

Acute Treatment Unit (ATU)

As defined by the Colorado Department of Public Health and Environment (CDPHE), an Acute Treatment Unit (ATU) is a facility or a distinct part of a facility for short-term psychiatric care, which may include substance use disorder treatment, and which provides a total, 24-hour therapeutically planned and professionally staffed environment for persons who do not require inpatient hospitalization but need more intense and individual services than are available on an outpatient basis, such as crisis management and stabilization services.

ATUs serve an important purpose in a community continuum of care. Short-term sub-acute psychiatric care assists an individual who may be harmful to themselves or others and requires stabilization and evaluation. They are significantly less costly than inpatient hospitalization. ATUs also serve as a bridge to longer term care and treatment services.

There are currently no ATUs in Larimer County. The closest ATU is a 16-bed facility in Greeley, run by NRBH. The average length of stay in 2016 was 5.15 days. The annual occupancy rate is 73%. While the ATU in Weld County is not always accessible, there are other options for acute treatment in Louisville and Arapahoe County. Within the NRBH system, individuals who are intoxicated and also demonstrate a need for mental health crisis services are first admitted to the detox. Once detox is progressing, they are evaluated for mental health concerns and admitted to the ATU when appropriate. However, when individuals have to leave their community for services, there is not often seamless connection to ongoing care, which helps to prevent future crises.

Having a local ATU would give a more appropriate and lower-cost option for patients who need stabilization but don't require hospitalization. Other benefits include providing easier access for family support, and easier transition to the next level of care due to its existence in our local community. When significant care is needed, but not at the level of inpatient hospitalization, an ATU also offers a significantly less costly alternative to hospitalization. Providers have consistently stated that some admissions to Mountain Crest Behavioral Health Center have been made because of the need for quick 24/7 services with psychiatric care, but that for some patients, the care does not have to be at the inpatient hospitalization level.

Crisis Stabilization Unit (CSU)

The State of Colorado began providing partial funding to add Crisis Stabilization Units (CSU) in 2015 in various locations in the state. In Larimer County, SummitStone Health Partners opened the Community Crisis Clinic in Fort Collins in 2015, which provides 24/7 walk-in and mobile services to people with a self-identified behavioral health crisis. This facility addresses the immediate crisis needs of individuals and families in all of Larimer County. Currently, this facility takes approximately 1,700 crisis calls in a year, with over 2,000 walk-in services, and

660 admissions to crisis stabilization beds; however, the facility is operating at approximately 55% of capacity so there is room for growth. When a person is admitted, the Crisis Stabilization Unit can provide up to five days of intensive services for adults in need of stabilization, including those on a 72-hour mental health hold. In Greeley, NRBH's ATU also provides CSU services for residents of Weld County.

Change in Recommendations Regarding Crisis Stabilization Unit (CSU) vs. Acute Treatment Unit (ATU)

The differences between an Acute Treatment Unit (ATU) level of care and a Crisis Stabilization Unit (CSU) level of care are minimal. While creating a local ATU was one of the original recommendations in the 2016 "Recommendations" report, and was deemed a critical need, current recommendations have changed as a result of the local CSU that now exists in Larimer County.

The Larimer County CSU, if located at the new facility being proposed, could meet all of the needs that an ATU could, providing a close, more quickly accessible facility with ready psychiatric care for those experiencing the need for 24/7 services, and a more robust entry point into the continuum of services being developed within the facility and in the community. There would be a very significant benefit of locating the CSU in the same facility with withdrawal management services since CSUs don't provide withdrawal management. This means that currently, patients with drugs or alcohol in their system are often diverted to the Emergency Room, NRBH in Greeley, or inpatient hospitalization. A more efficient and higher standard of care for a person who is experiencing both a mental health disorder and a substance use disorder would be to be able to serve them in one facility, making it easy to flexibly and quickly place them in the level of care appropriate for their stage of need and move them as needs change.

Summary of Gaps in ATU/CSU Level of Care

- While Larimer County does not currently have an ATU, it does have a CSU, which has capacity to expand services to meet increasing needs over time and which provides the same level of care as an ATU.
- Current limitations on the existing CSU include the inability to effectively serve individuals in need of detoxification from substances, which results in individuals needing to be transported from the CSU to a detoxification facility (or often ending up in the emergency department at local hospitals) if they are in crisis but have alcohol or drugs in their system. Best practice indicates that the siting of CSU services at the same location as withdrawal management services is an effective practice.

Other Significant Community Needs Identified

In speaking with citizens, care providers, and others throughout the process of creating these recommendations, two other themes emerged in terms of community interests and needs related to behavioral health care and support: 1) An interest in early identification and intervention with youth and families; and 2) An interest in suicide prevention.

Early Identification and Intervention with Youth and Families

It is widely shown that the earlier identification of mental illness and substance use issues happens, the better the outcomes due to the ability to initiate intervention and support earlier. While the majority of services included in this report focus on adults, the Guidance Team creating these recommendations is aware of community interest in early identification and intervention and recognizes the need to support identification, treatment, and support services that will benefit families and youth. While specific recommendations would require further study to develop, potential areas of focus include supporting youth substance use prevention programming; expanding existing programming improving the connection between schools, early identification, and treatment services for youth and families; and increasing access to child and adolescent psychological and psychiatric services.

Suicide Prevention

Although Larimer County's suicide rate is higher than the national average; little funding is currently available to support dedicated suicide prevention programming, although models with evidence of effectiveness exist. Again, while specific recommendations have not yet been made, potential areas of support include supporting the sustainability of current, local and grassroots suicide prevention efforts in order to facilitate the expansion of the evidence-based ZeroSuicide model across the community, and support the expansion of suicide prevention training for community members that will increase identification of individuals at risk for suicide, and connection of these individuals to support and treatment.

Summary of Gaps in Behavioral Health Services in Larimer County

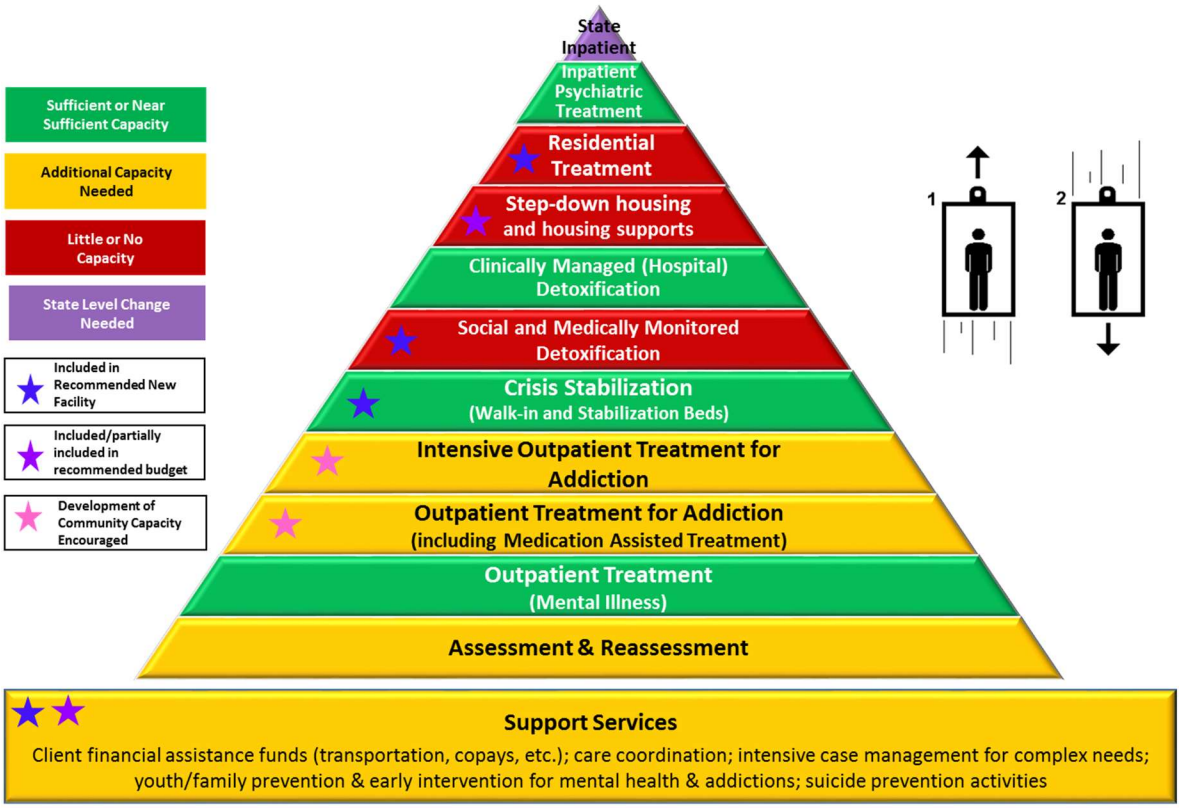
Key service gaps identified for Larimer County include:

- Local withdrawal management (drug/alcohol detoxification) services, including access to both social model beds and medically-monitored beds
- Residential treatment and residential step-down options for substance use disorders including
    - Short-term residential treatment beds
    - Long-term residential treatment ("halfway houses") to help people transition from residential treatment to supported-living in the community
    - Voluntary "sober living" houses such as Oxford Houses
    - Support services to enable treatment and care coordination for people living in permanent supportive housing
- Moderately intensive to intensive care coordination for people with particularly intensive and complex needs
- Client financial assistance to assist people with affording care
- Funding for early identification and early intervention services and resources for youth and families at risk for or experiencing mental illness and/or substance use issues or disorders
- Funding for suicide prevention efforts

The graphic below (Figure 8) illustrates the key levels of care needed in a system of care, and shows those that are currently provided at adequate levels in our community in green. Those needing increased capacity are shown in yellow. Those in red do not currently exist at all in Larimer County.

Expanding both the services in yellow as well as developing local services currently depicted in red is the focus of the recommendations in this document.

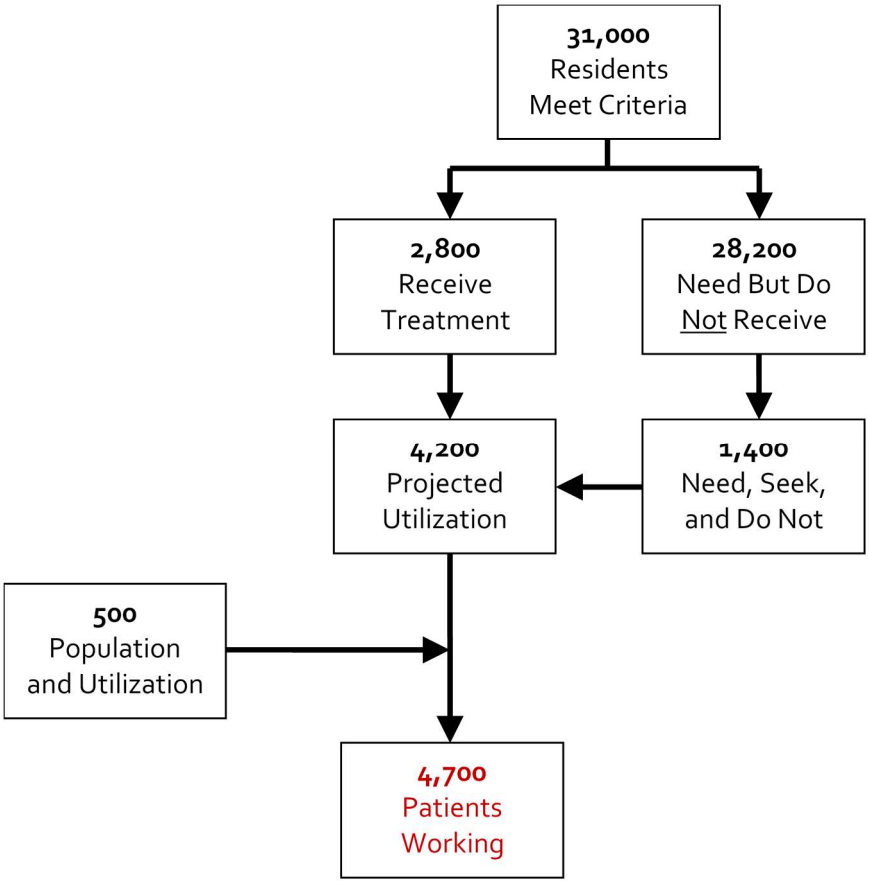
Figure 8: Current Behavioral Health Service Capacity in Larimer County



Calculation of Need and Number of Individuals to be Served

In the original 2016 report, NIATx provided a rationale for the calculation of need and resulting number of individuals to be served by the recommended development and expansion of services. This was based on Colorado prevalence data from the 2014 National Survey of Drug Use and Health, a calculation of the number of individuals currently estimated to be receiving treatment, and the number of individuals who therefore can be calculated that need but do not receive treatment. Additionally, data estimates were applied to identify a smaller number of individuals who need and seek treatment but still do not get treatment. These data points were used to project a working hypothesis of serving about 4,700 patients. However, MHSU Alliance project staff have taken a more in-depth look at our local community need and service utilization, applied updated national data, and assessed other existing withdrawal management services in Colorado in order to determine that now, over 5,000 individuals would need to be served.

Figure 9: Original Projected Substance Use Disorder Need Diagram (From NIATx 2016 Report using 2014 data)



The following is a description of the key differences between the NIATx estimates of people with substance use disorders and the MHSU Alliance staff estimates.

NIATx's original SUD prevalence estimate (31,000) combined 2014 NSDUH data categories of individuals with alcohol dependence (8.4%), with the number of individuals with drug dependence (2.8%), giving them a total of 31,000, or roughly 11% of Larimer County's population aged 12 and older in 2016. However, the NIATx estimates did not account for the thousands of individuals who have both alcohol dependence and drug dependence, which can artificially inflate the totals if they are simply added together. This would, then, result in a total number of substance use disorders in the County, but not the number of people with a substance use disorder.

In order to eliminate duplication, MHSU Alliance staff utilized the most current 2016 NSDUH data, which does now account for individuals with more than one substance use disorder diagnosis, thus giving an updated estimate of approximately 25,000 (8.5%) residents in Larimer County with a substance use disorder.

Additionally, because the NSDUH prevalence data does not include individuals that are homeless or transient that are not sheltered, or individuals who are incarcerated in correctional facilities, it is missing critical populations. These two populations of people account for a large percentage of emergency, law enforcement, and behavioral health services utilization across the County; and prevalence of mental illness and substance use disorders in these populations are often higher than the general population. Thus, it was critical for MHSU Alliance staff to include these populations in the updated recommendations, as these sub-groups are frequently utilizing local resources and emergency services and would benefit the most from a full continuum of care services.

Table 1 below illustrates the 2017 Average Daily Criminal Justice Population Totals for Larimer County that would not have been included in the NIATx 2016 SUD prevalence estimates. Jail data reported that approximately 50% of this total daily population of 1,054 have substance use-related issues (or over 500 individuals).[64]

Table 1: Larimer County Average Daily Criminal Justice Population Totals

Avg. Daily Population (2017)	Jail	Community Corrections	Work Release
	584	297	173
Total	**1,054** (approximately 500 with substance use related issues)		

MHSU Alliance staff also included estimates for the local homeless population, as this population was also not accounted for in the 2016 SUD prevalence estimates. Larimer County currently has a monthly population of individuals experiencing non-chronic homelessness between 200-400 and approximately 325 individuals experiencing chronic homelessness[65]. National data indicates that about two-thirds of those experiencing chronic homelessness have SUD-related issues and approximately 37% of the nation's general homeless population has either a serious mental illness and/or SUD-related issues[66]. Applying these national statistics to the local population would indicate that Larimer County has between 300-350 individuals experiencing homelessness with some SUD treatment needs.

In order to account for the additional incarcerated individuals (500) and the homeless population with treatment needs (325), staff added an additional 1,000 individuals to the total SUD prevalence in the county (26,000).

The Guidance Team also asked staff to dig deeper into local realities regarding utilization data of emergency departments, law enforcement, jail, behavioral health providers, and service payers. As a result of this work, changes were made to the NIATx working hypothesis of 4,700 people being served that was used in the 2016 report. A new working hypothesis of over 5,000 people was developed as a result of the updated prevalence data (26,000 individuals with SUDs in

[64] D. Stalls (personal communication, August 18, 2017)
[65] H. LeMasurier (personal communication, March 21, 2018)
[66] SAHMSA. (2018). Homelessness and Housing. Accessed from https://www.samhsa.gov/homelessness-housing

Larimer County), additional utilization information gathered by MHSU Alliance staff, and the addition of two new populations of individuals to the working hypothesis.

The first new population the Guidance Team identified includes those individuals who don't meet the criteria for treatment but who may occasionally need to use detoxification services. This is likely a small number of admissions who have had heavy binge drinking episodes (sporting events, music festivals etc.). Larimer County has much higher reported binge drinking rates compared to the state[67], as well as a high prevalence for music/beer festivals and has a local university student population. Therefore, it seemed critical to include this population in the new estimates and need for services.

The second new population that was included by staff were those individuals who do meet the clinical criteria for treatment, but are not generally seeking it. NIATx focused on those individuals currently receiving treatment and those who needed treatment and were seeking it, but do not currently get treatment. However, staff identified a large number of individuals who needed treatment services but weren't actively seeking it, yet these were the individuals that were taking up a large portion of the local law enforcement and emergency service resources on a consistent basis. It is these reasons that this population of individuals needs to be accounted for when considering how to improve current services, because these are the individuals that have the best opportunities to be diverted away from the jail and emergency department systems (see Figure 16). UCHealth documented approximately 2,300 admissions to their local emergency departments in 2016 for alcohol detox only[68]. Mountain Crest also identified several hundred individuals currently utilizing their hospital-level of care for detox that could be served more appropriately at a local lower level detoxification facility. There were an additional 60 individuals in 2016 brought to the jail to detox, either because the emergency departments were busy or the Greeley detox was full[69]. We have estimated that these approximately 2,400 total emergency department visits and jail admits represent approximately 1,000 individuals accounting for about 2.5 emergency department visits per person/per year.

Finally, MHSU Alliance staff also accounted for people who are currently detoxing in some of our other correctional facilities (Work Release, Community Corrections, etc.). Staff gathered this admissions data from the various sources mentioned above to calculate an estimated total of projected admissions to a local detoxification facility. See Table 2 below for these projections.

[67] 2016 Community Health Survey. Health District of Northern Larimer County. Retrieved from https://www.healthdistrict.org/2016-community-health-assessment
[68] C. Lowe, UCHealth (personal communication, 2017)
[69] S. Prevost, LCSO (personal communication, 2017)

Table 2: Withdrawal Management (Detox) Admission Projections

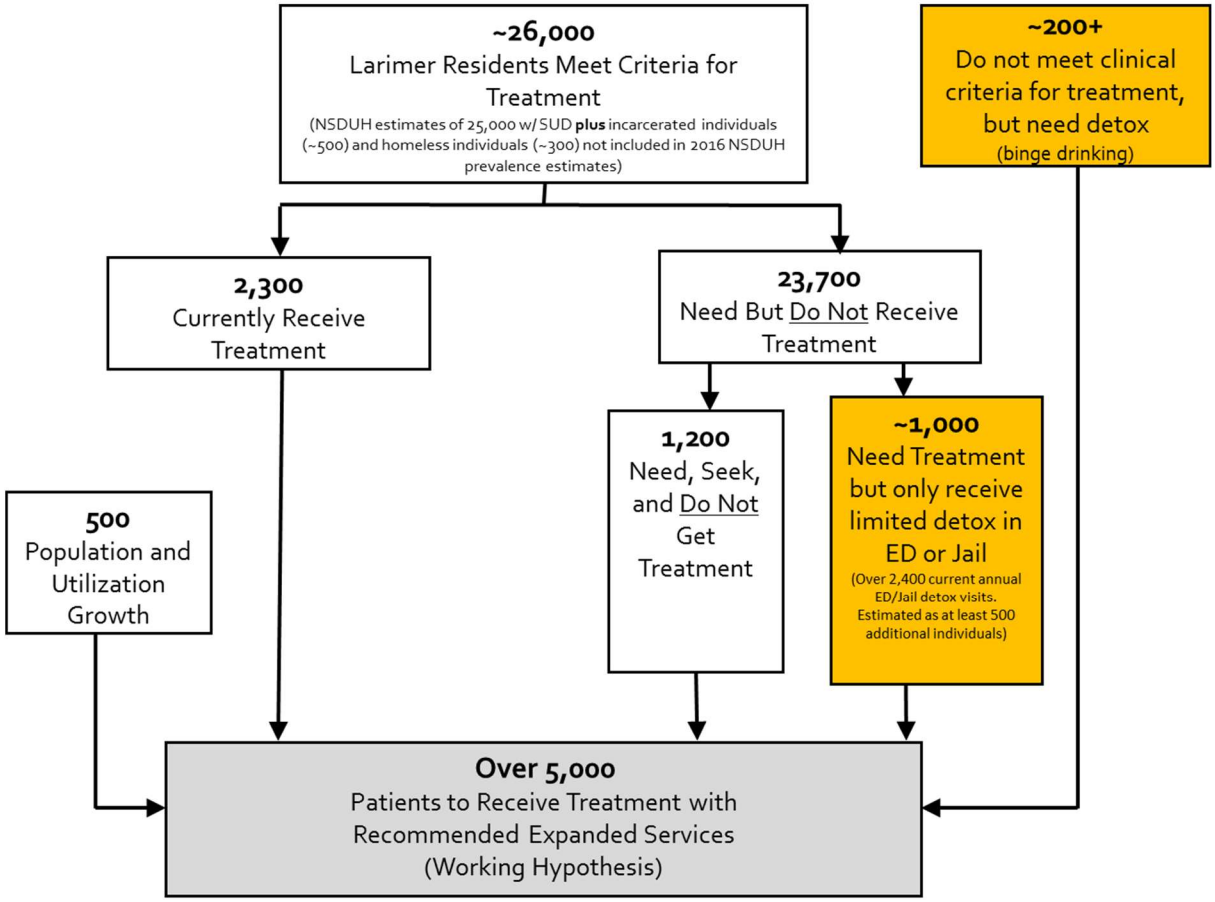
Admissions Source	WM/Detox Admissions	Comments
UCHealth Transfers to Greeley NRBH Detox – 2016	591	Number of individuals transferred from UCHealth care to NRBH Greeley Detox in 2016
UCHealth Emergency Departments – 2016	2,000	Emergency department visits with first-listed alcohol-related diagnosis (number is higher if drug-related diagnoses were included)
UCHealth Mountain Crest	500	Projected individuals who could have been served by Greeley detox but no beds or transportation was available
LC Jail – 2016	60	Individuals brought to jail for detox only, without any pending charges
Work Release/Community Corrections – Estimate	75	Projected individuals detoxing in other correctional settings because no local detox facility exists
Community Walk-Ins	350	Local dedicated detox facility would encourage walk-ins
Projected Admissions Totals	***3,500 admissions** (not patients)	

**Staff was able to project a total admissions/visit count based on local utilization data. This does not represent a total number of patients that would be served. More information is needed in order to accurately project the total number of patients served within the projected 3,500 admissions, as it is very likely that many of these patients would account for multiple admits.*

These individuals could instead be brought to a local detoxification facility, if available, reducing the burden on the local jail, correctional facilities, and the emergency departments. This addition of a local detoxification facility would also allow individuals to be properly assessed and possibly retained into other levels of treatment, rather than just being released back into the community without a referral. It would also ensure that individuals would have the proper medical care and access to medications that is needed for individuals to safely and more comfortably detox.

Based on the additional individuals being served and previously unidentified populations in NSDUH's prevalence estimates (i.e., homeless/transient and institutionalized in correctional facilities), as well as the additional individuals identified in need of detoxification services, we have increased the overall patient working hypothesis from the NIATx 4,700 people to over 5,000.

Figure 10: Substance Use Disorder Need Diagram (Updated by Staff, 2018)



Note that NIATx states in Appendix M, "Despite the unique withdrawal management environment in Colorado, NIATx group continues to think the Larimer Group's "capture rate" could be overstated."

Projection of Admissions to Specific Levels of Care

In their 2016 report, NIATx projected the number of direct admissions into specific services as well as the step-down admissions into various levels of service for approximately 4,700 patients. The figure on the following page describes areas where changes were made to NIATx projections during the 2018 update.

Figure 11: NIATx 2016 Patient Flow: Direct and Step-Down Admissions for 4,700 patients

DIRECT ADMISSIONS		STEP-DOWN ADMISSIONS			
		Withdrawal Management	Residential	IOP	OP
Withdrawal Management	1,175 25%		294 25%	295 25%	589 50%
Residential	470 10%			94 20%	330 70%
IOP	700 15%				630 90%
OP	2,350 50%				
MAT	25% of all direct				
Care Coordination	30% of all direct				
Sub-Total Direct Admissions	4,700 100%	1175	470	700	2350
Subtotal Step-Down Admissions			294	389	1,550
Total Admissions By Service		1,175	764	1,089	3,900

Local utilization data (ED, MtnCrest, Corrections etc.) indicated a much greater need for detox services in the community than NIATx estimated in 2016. This number has been increased by staff to **3,500 admissions**, to be served at both the medically-monitored and the "social" level of withdrawal management.

The "social" detox level has much shorter lengths of stay and typically serves those populations who are not actively seeking treatment and are likely less motivated. This equates to much higher admission rates than other levels of care and many individuals being re-admitted multiple times into this level of care. Step-down into other levels of ongoing treatment are likely to be lower for social detox than for other levels of detox. Because of this, staff broke the detox population into two distinct groups (Seeking TX v. Not Seeking TX). The "social" detox group would likely utilize detox services multiple times before being motivated enough to access other levels of care (Residential, IOP, OP etc.)

NIATx assumed a 25% step-down rate from Withdrawal Mgmt. into Residential, 25% into IOP, and 50% into OP services.

Colorado historically has much lower step-down rates from Withdrawal Mgmt. into Residential care (3-5%). Because of this staff reduced NIATx's 25% rate down to 10%, which still assumes a better retention rate than state rates due to thorough patient assessments and care coordination efforts recommended by staff.

Staff also applied much lower step-down percentages into these other levels of care for the population accessing "social" detox due to them not actively seeking treatment and likely decreased personal motivation for treatment services.

Figure 12 below provides updated projected admissions totals from MHSU Alliance staff work in 2018.

Figure 12: Updated 2018 Direct and Step-Down Admissions (MHSU Alliance)

DIRECT ADMISSIONS		STEP-DOWN ADMISSIONS			
		Withdrawal Management	Residential	IOP	OP
Withdrawal Management	3,500		325 5-10%	600 10-25%	1,425 25-50%
Residential	470			94 20%	330 70%
IOP	700				630 90%
OP	2,350				
MAT	25% of all direct				
Care Coordination	30% of all direct				
Sub-Total Direct Admissions	7,020	3,500	470	700	2350
Subtotal Step-Down Admissions			325	694	2384
Total Admissions By Service		3,500	795	1,394	4,734
Total Admissions Across Services					10,423

The new estimates of over 5,000 patients represents over 10,000 total admissions. These updated totals were used to estimate the number of beds, facility space, staffing, and other resources that would be needed to accommodate the community need.

Figure 13: Updated 2018 Patient Distribution and Capacity Estimates (MHSU Alliance)

Residential (595 total admissions)			
Loc.	**No. of Admits**	**Calculation**	**Est. Cap.**
STIR 12 days	318 53%	318@12 ALOS=3816/328days	12 beds
STIR 21(C) days	318 53%	318@21 ALOS=6678 per request	20 beds
LIR	198 33%	398@90 ALOS= 35,820/328/2 =	55 beds
SH	40 7%	Permanent housing. Service budget impact only	
SbH	40 7%		

The area circled in red is different from original NIATx calculations. Alliance staff calculated the total number of LIR beds needed, but then reduced the number by half due to budget considerations and the feasibility of going from no capacity to 155 beds. This meant also reducing the total Residential admissions by 200 and re-calculating the distribution percentages across the various residential levels of care.

LIR 398/2 = 198 & 110 beds/2 = 55 beds

Total Admissions 795 – 200 = 595

Intensive Outpatient (IOP) (1,394 total admissions)
No. of Admissions: 1394 patients
Calculation: 1,394 @ 12days ALOS = 16,728 treatment days/263 average days
Result: 63 patient census per day = 6 groups of 10

Outpatient (OP) (4,734 total admissions)
No. of Admissions: 4734 patients
Calculation: 4,734 @ 10 session average = 43,740 treatment hours/26 hrs per week per clinician / 50 weeks
Result: Staff capacity = 34 FTE clinicians

Recommendations to Fill Gaps in Behavioral Health Services in Larimer County

The previous information has been used to develop specific recommendations to create and support adequate services in each of the areas where gaps have been identified. It is recommended that many of the proposed services be provided in one facility in order to create efficiencies and a better continuum of care; however, many services will also be supported throughout the community. The following is a summary of these recommendations:

1. **Expand treatment capacity** to provide services to over 5,000 adults. The total annual utilization of all services included in the recommended model is estimated at over 10,000 admissions (defined broadly).

2. **Create the ability to perform medical clearance screenings and triage on-site** to reduce the need for emergency-room levels of care and transport to other levels of care.

   Provide in-depth assessment and re-assessment (differential diagnosis) on site in order to place patients in appropriate levels of care.

3. **Move the existing Crisis Stabilization Unit to the Behavioral Health Services Center** to provide walk-in crisis assessment and short-term crisis stabilization for people whose symptoms and treatment can be managed in non-hospital settings. *Build 16 beds with the capacity to provide up to 1,700 admissions. Begin operation with approximately 10 beds and 700 admissions.*

4. **Create a Withdrawal Management Center (drug/alcohol detoxification) in the Behavioral Health Services Center** to support detox from alcohol or drugs and transition individuals into treatment. Provide social (clinically managed) (American Society of Addiction Medicine [ASAM level 3.2]) and medically-monitored (ASAM level 3.7) levels of detox services; start patients on medication-assisted treatment for alcohol and opioid use disorders; and support more ambulatory detox (ASAM level 2.0) managed on an outpatient basis in the community. Those with higher-level medical needs will continue to access the intensive inpatient detoxification services (ASAM level 4.0) provided in local hospital settings. *Build 32 beds with the capacity for approximately 4,300 annual admissions. Begin operations with 26 beds with the capacity for approximately 3,500 admissions per year.*

5. **Create or support several levels of residential care to support up to 795 short-term and long-term supported residential admissions** as follows:
   - **Create a short-term, intensive residential treatment unit** in the facility, which would provide a safe therapeutic environment where clinical services and medications are available to patients who are medically stable and withdrawn from substances. *Build 16 beds with the capacity for up to 400 annual admissions. Begin operations with 13 beds with the capacity for up to 320 admissions per year.*
   - **Support low-intensity residential services** designed to build and reinforce a stable routine in a safe and supportive context for residents who lack a stable living

environment. Provide 24/7 certified addiction counselors. Encourage development of facilities (55 beds) by community providers.
- **Encourage the expansion/development of independent, voluntary sober housing** in the community, such as Oxford Houses, to provide safe and supportive living environments for those who choose and can pay for this type of residence. No external financing is recommended for this type of housing.

6. **Provide funding to support behavioral health support services,** including:
   - Early-identification and early-intervention services and resources for youth and families at risk for, or experiencing, mental illness or substance use issues or disorders
   - Suicide prevention efforts
   - Moderately intensive to intensive care coordination for up to 250 clients
   - A client assistance fund to help cover needs such as transportation, co-pays (including for IOP and OP), medication, and personal emergencies for up to 1,380 clients
   - Support services in permanent supportive housing for up to 100 clients with chronic health conditions who lack family/social supports and are disconnected from employment and other community functions (housing to be provided by other sources)

7. **Encourage the development of community capacity for intensive outpatient services** for individuals who require a more structured substance use disorder outpatient treatment experience than traditional outpatient treatment. Capacity needed: 1,400 IOP admissions, an average of 30 visits per admission, and an average daily census of 63. (Note: Since health insurance is likely to cover these services, this document's budget recommendation is for financial assistance for up to 175 uninsured or underinsured individuals.)

8. **Encourage the development of community capacity for outpatient substance use disorder treatment including medication-assisted treatment** to provide up to 4,700 admissions. (Note: Since health insurance is likely to cover these services, this document's budget recommendation is assistance for up to 525 uninsured or underinsured people.)

Impact of Implementation of Recommendations on Service Levels in the Community

Implementation of the recommendations contained in this document would result in a greatly expanded and more complete continuum of care for mental illnesses and addictions in Larimer County.

Figure 14 on the following page shows how the implementation of the recommendations contained in this document would impact the local availability of services compared to Figure 15, which shows current services and local capacity.

Figure 14: Projected Behavioral Health Service Capacity in Larimer County after Implementation of Recommendations

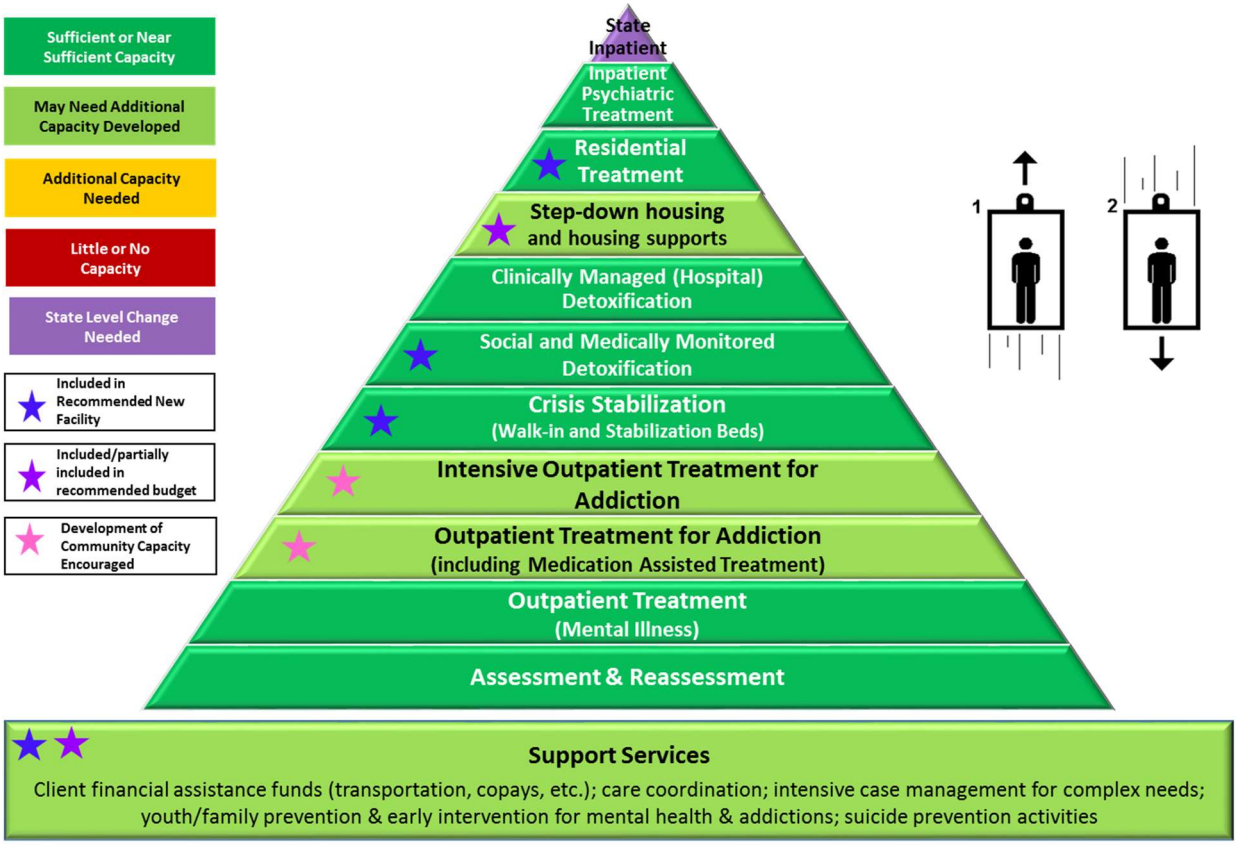
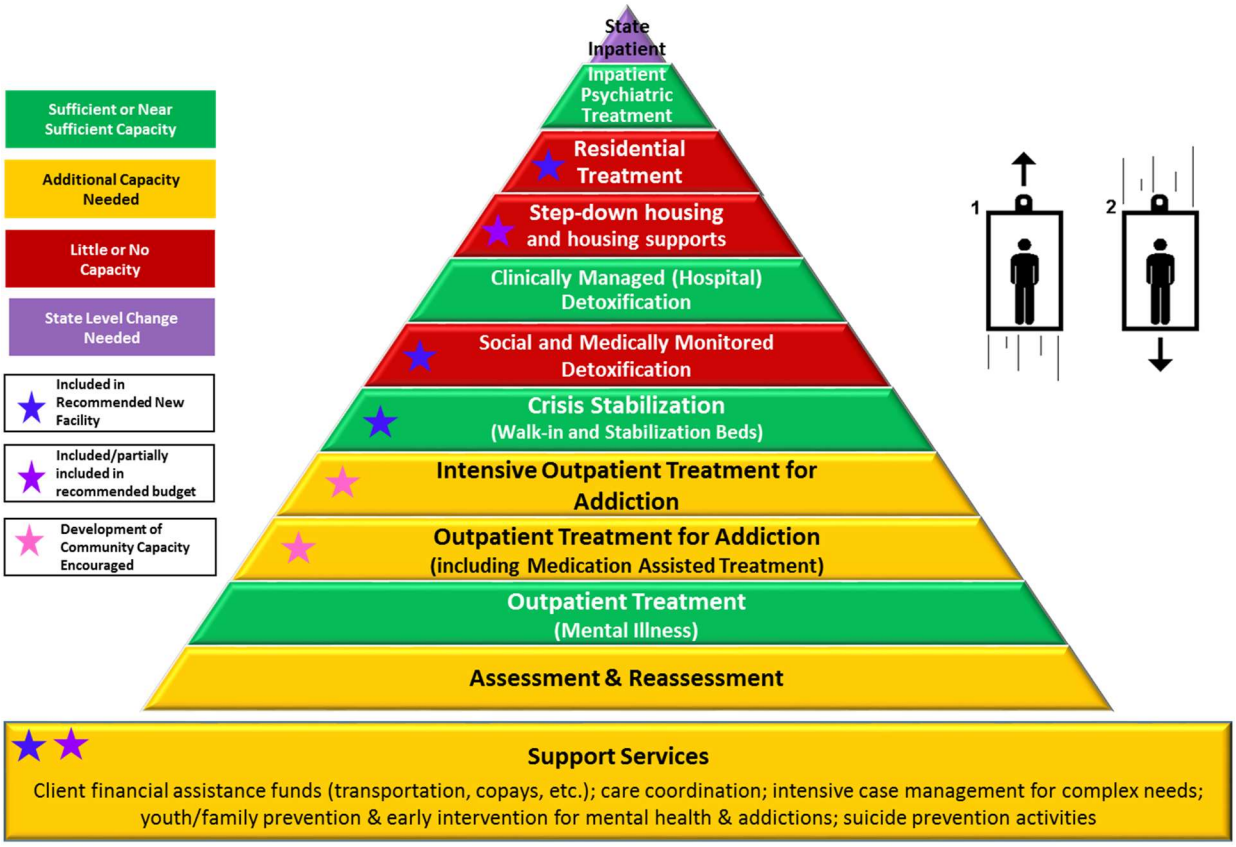


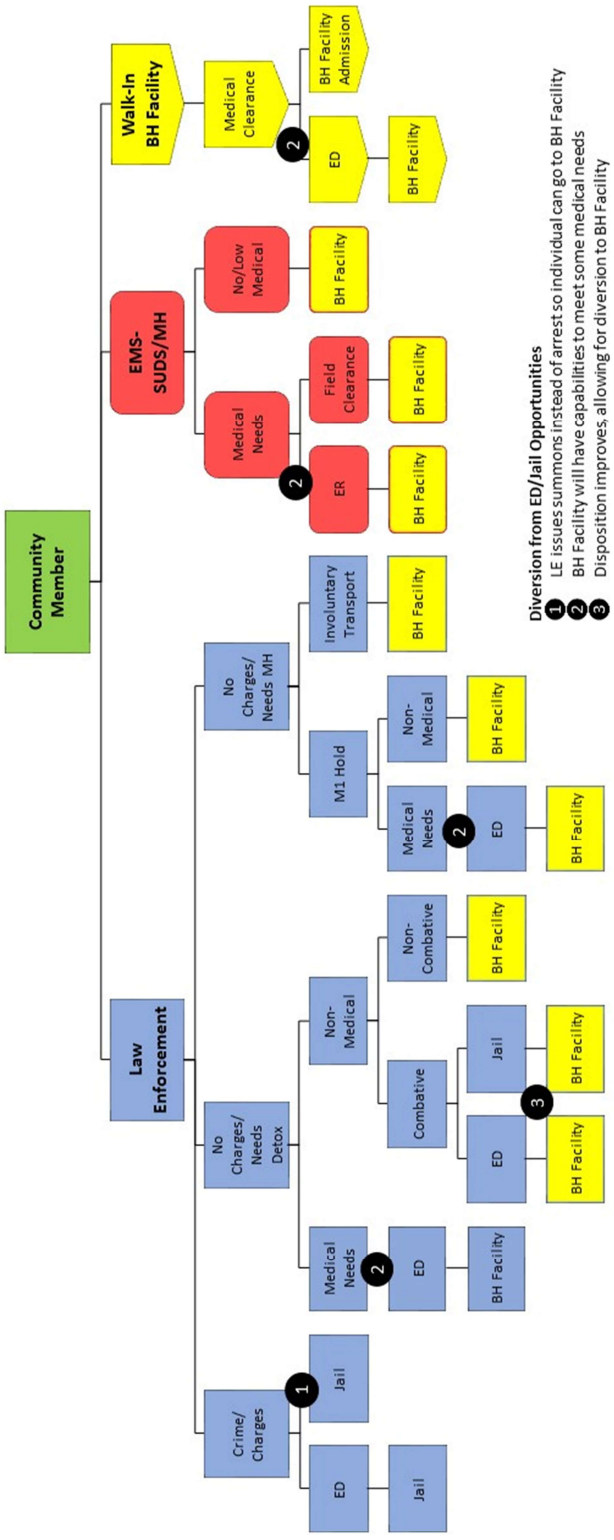
Figure 15: Current Behavioral Health Service Capacity in Larimer County



Impact on Other Community Services and Organizations

Having the recommended service array available in a 24/7 Behavioral Health Service facility will also have key impacts on other local community services and organizations. Figure 16 on the following page illustrates the many opportunities for earlier diversion to the new treatment facility and away from our more costly jail and emergency departments. These opportunities for diversion to the facility, where a range of detoxification services can be provided as a potential entry point into other treatment services in the facility and/or community, represent a key reason for configuring the services in the facility so that medical clearance, mental health and substance use related crises, and treatment are all available in one location. During this investigation of need for services, our local law enforcement, emergency responders, and hospital emergency department staff continually stressed how critical this expansion of services would be for their day to day operations. By creating a dedicated detox and crisis stabilization center under one roof, first responders will have a place to bring individuals where they can be properly assessed and housed. This will help reduce "bouncing" of individuals between various locations in the community and free up law enforcement and EMS to respond to more calls. It will also reduce the current reliance on jails and emergency departments to no longer have to provide this low-level of detoxification that generally does not result in connection to other levels treatment or follow-up care, and is much more costly.

Figure 16: Diversion to Behavioral Health Facility Flow Chart



Financial and Facility Needs

Financial Resources Needed

A comprehensive budget has been developed, and the estimated annual cost to provide these services is $15.2 million (taking into account an anticipated $6.5 million in client and payer revenues). For more detailed budget information, see Appendices D and E.

Projected Overall Operating Budget	
Personnel	$11.7 million
Operational (operational costs, maintenance, equipment, contracted services, etc.)	7.2 million
Client Assistance	2.3 million
Family and Youth Resources and Suicide Prevention Resources	0.5 million
TOTAL	**$21.7 million**
Less Client and Payer Revenues	6.5 million
Needed Annual Funding	**$15.2 million**

Facility Needs and Associated Costs

Estimates for facility space and costs are based on providing many services in one facility. Based on current estimates, a 60,000 square-foot facility is needed. Total facility and project land costs are estimated at $33.4 million if built in 2020. Facility costs have not been estimated for low-intensity residential services. Land costs will depend on the site selected.

Similar to other dedicated, state-of-the-art health facilities in the area, such as the $20M Cancer Center built by UCHealth in 2014, this facility will house key treatment services in one place. One key difference is that the services provided by other healthcare facilities, such as the Cancer Center, are paid for by health insurance; while only about 30% of costs of the recommended behavioral health treatment services would receive insurance reimbursement. This results in the funding gap of about $15 million a year.

For a more detailed list of recommended services, see Appendix A (List of Recommended Services and Capacity). For information on how proposed services impact local service capacity, See Appendix B. For a comparison of 2018 service recommendations to 2016 service recommendations, see Appendix C. For more detailed facility and budget information, see Appendices D and E.

Benefits and Value to the Community *(From the "Development of Critical Behavioral Health Services Report by NIATx, February 19, 2016)*

There is ample evidence to demonstrate significant value and benefits of behavioral health disorder treatment. Patients and families benefit from increased health, well-being, and ability to function in their family, work, community, and society (similar benefits as those seen for managing symptoms of diabetes or hypertension). Communities realize reductions in related costs. Additionally, the National Institute of Health estimates that every dollar spent on addiction treatment yields a return of between $4 and $7 in reduced drug-related crime, criminal justice costs, and theft. When healthcare related savings, such as savings from reduced use of emergency departments, ambulance, and inpatient treatment are included, total savings can exceed costs by a ratio of 12 to 1.

Benefits to the Community

Substance abuse costs our nation over $600 billion annually.[70] However, adequate treatment can help reduce these costs:

- Drug addiction treatment has been shown to reduce associated health and social costs by more than the cost of treatment and to be much less expensive than its alternatives, such as incarcerating those with addictions.[71] [72]
- According to several conservative estimates, every dollar spent on addiction treatment programs yields a return of between $4 and $7 in reduced drug-related crime, criminal justice costs, and theft. When savings related to healthcare are included, total savings can exceed costs by a ratio of 12 to 1.[73]
- For those who received treatment, the likelihood of being arrested decreased 16 percent and the likelihood of felony convictions dropped 34 percent, further contributing to cost savings for the state.[74] Washington State estimated that it will save $2.58 in criminal justice costs for every dollar spent on treatment, and realize an overall $3.77 offset per dollar of treatment costs.[75]
- Over the first four years of operation, the Community Dual Disorder Treatment (CDDT) program in Larimer County, an Integrated Dual Disorder Treatment (IDDT) program, significantly reduced overall inappropriate service usage by 58 percent. ER visits among participants fell by 84 percent, ambulance usage went down by 78 percent, in-patient psychiatric treatment was reduced by 92 percent, and arrests were lowered by 62 percent,

[70] National Institute for Health. (2012).
[71] National Institute for Health. (2012).
[72] Anglin, M. D., Nosyk, B., Jaffe, A., Urada, D., & Evans, E. (2013). Offender Diversion Into Substance Use Disorder Treatment: The Economic Impact of California's Proposition 36. *American Journal of Public Health*, *103*(6), 10.2105/AJPH.2012.301168. http://doi.org/10.2105/AJPH.2012.301168
[73] National Institute for Health. (2012).
[74] Estee, S. and Norlund, D. (2003). Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report. R.a.D.A. Division and W.S.Do.S.a.H. Services, Washington State.
[75] Mancuso, D., & Felver, B. (2010). Health Care Reform, Medicaid Expansion and Access to Alcohol/Drug Treatment: Opportunities for Disability Prevention. (RDA Report No. 4.84) Olympia, WA: Washington State Department of Social and Health Services.

resulting in savings to the community of over $174,000 after program costs were factored in.[76]

- A 2013 study found that people receiving medication for their mental health disorder were significantly less likely to be arrested, and that receipt of outpatient services also resulted in a decreased likelihood of arrest. The researchers also compared criminal justice costs with mental health treatment costs. Individuals who were arrested received less treatment and each cost the government approximately $95,000 during the study period. Individuals who were not arrested received more treatment and each cost the government approximately $68,000 during the study period.[77]

Benefits to Payers

There are also proven benefits of effective behavioral health disorder treatment to those organizations that pay for healthcare, such as health insurance companies and state and federal healthcare plans such as Medicaid and Medicare. Values reaped by payers may result in helping to reduce growth in premiums for individuals and organizations as well as controlling taxpayer costs for federal and state programs.

- In one study of four different modalities of substance abuse/use treatment, including inpatient, residential, detox/methadone, and outpatient drug-free modalities; when compared to other health interventions, all of the substance abuse treatment modalities examined appear to be cost-effective when compared to ongoing substance abuse/use.[78]
- Some states have found that providing adequate mental health and addiction-treatment benefits can dramatically reduce healthcare costs and Medicaid spending. A study of alcohol and drug abuse treatment programs in Washington State found that providing a full addiction-treatment benefit resulted in a per-patient savings of $398 per month in Medicaid spending.[79]
- Kaiser Permanente Northern California analyzed the average medical costs during 18 months pre and post substance use treatment and found that the SU treatment group had a 35% reduction in inpatient cost, 39% reduction in ER cost, and a 26% reduction in total medical cost, compared with a matched control group.[80] [81]
- Kaiser also found that family members of patients with substance use disorders had high healthcare costs and were more likely to be diagnosed with a number of medical conditions than family members of similar persons without a substance use condition.[82]

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[76] Cooper, Bruce. (2013). *Larimer County Community Dual Disorder Treatment Program, Program Evaluation of First Four Years*. Fort Collins, CO: Health District of Northern Larimer County.

[77] Van Dorn, R. A., Desmarais, S. L., Petrila, J., Haynes, D., & Singh, J. P. (2013). Effects of outpatient treatment on risk of arrest of adults with serious mental illness and associated costs. *Psychiatric Services*. Retrieved from http://focus.psychiatryonline.org/doi/10.1176/appi.ps.201200406

[78] Mojtabai, R., & Graff Zivin, J. (2003). Effectiveness and Cost-effectiveness of Four Treatment Modalities for Substance Disorders: A Propensity Score Analysis. *Health Services Research*, *38*(1p1), 233–259.

[79] Estee, S. and Norlund, D. (2003). Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report. R.a.D.A. Division and W.S.Do.S.a.H. Services, Washington State.

[80] Weisner C. Cost Studies at Northern California Kaiser Permanente. Presentation to County Alcohol & Drug Program Administrators Association of California Sacramento, California. January 28, 2010

[81] Weisner C, Mertens J, Parthasarathy S, et al. Integrating primary medical care with addiction treatment: A randomized controlled trial. Journal of the American Medical Association, 2001; 286: 1715-1723.

[82] Weisner C, Mertens J, Parthasarathy S, et al. 2001.

For families of SU patients who were abstinent at one-year after treatment began, the healthcare costs of family members were no longer higher than other Kaiser members.[83]

Conclusions on Value and Benefits of Effective Substance Use Disorder Treatment

In the 21st century there is ample evidence that substance use disorders are treatable health conditions. There is also a strong body of evidence that treatment of substance use disorders is cost-effective and results in significant benefits to patients, families, the community, and payers. For an additional review of value and benefits, see Appendix F, Treatment is Cost Effective, and Benefits are Spread Between Many Different Pockets.

[83] Ray GT, Mertens JR, Weisner C. The excess medical cost and health problems of family members of persons diagnosed with alcohol or drug problems. Medical Care. February 2007. Vol. 45 Issue 2: 116-122.