Mat-Su Behavioral Health Environmental Scan Report 1 - The Crisis Response System

November 2014

Prepared by

McDowell Group Western Interstate Commission on Higher Education Mat-Su Health Foundation







REPORT #1: THE CRISIS RESPONSE SYSTEM

In 2013, as part of a Community Health Needs Assessment, professionals and residents ranked mental/emotional health and substance abuse issues (also referred to as behavioral health) as the highest priority health issues facing Mat-Su. The Mat-Su Health Foundation (MSHF), working closely with Mat-Su Regional Medical Center (MSRMC) and guided by a group of state and local leaders, sponsored a Behavioral Health Environmental Scan to examine the system that cares for Mat-Su residents. The Scan results will be released in three reports. This executive summary is for the report that examines the care that Mat-Su residents receive when they are experiencing a behavioral health crisis.

METHODOLOGY

The Scan included A Gap Analysis and Community Perceptions Study, conducted by the MSHF, which used data collected from 65 in-depth interviews with crisis responders and other professionals. A Policy and Funding Analysis, conducted by the Western Interstate Commission on Higher Education (WICHE) examined Alaska and federal statutes, rules, and funding data, as well as findings from 15 in-depth interviews with key statewide informants.

An Emergency Response and "Hot Spot" Analysis, conducted by McDowell Group, examined patient, visit, diagnosis, charge (cost), and first-responder data to provide a snapshot of how the community uses the Mat-Su Regional Medical Center (MSRMC) Emergency Department (ED). GIS mapping helped interpret the ED and socioeconomic data at the Mat-Su Borough level.

FINDINGS

THE IMPACT OF BEHAVIORAL HEALTH

Behavioral Health issues adversely affect lives, contribute to premature deaths, and cost money. The impacts on our community include:

- About 1 out of 4 vehicle fatalities and other serious injuries involve drugs and alcohol;
- Alcohol and substance abuse is suspected in almost half of all Mat-Su suicides and homicides;
- Mat-Su has a suicide death rate twice as high as the US rate, 23.2 deaths per 100,000 people vs. 11.3 for the U.S;
- In 2013, 20% of Mat-Su middle school students said that they seriously considered suicide in the last year.

The cost in dollars includes:

- In 2013, the Mat-Su Regional Medical Center Emergency Department served 2,391 patients with a behavioral health diagnoses with charges totalling an estimated \$23 million.*
- An additional \$1.6 million was spent on other parts of the response system such as law enforcement,
 911 dispatch, transport, services at the Alaska Psychiatric Institute, etc.
- * The amount paid may be less than the hospital charge amount due to Medicare and Medicaid reimbursement rates, contractual allowances, charity care, and other reductions.



These costs do not include residents who went directly to Anchorage for care and bypassed the MSRMC ED. Mat-Su residents seen at the ED for mental/emotional crises or emergencies related to substance abuse or alcohol have higher charges, more annual visits on average and longer stays, and are more likely to return to the hospital within 30 days compared to other patients.

Some behavioral health patients are high utilizers of services:

- 305 high utilizer patients (5+ visits/year) with a behavioral health diagnosis visited the ED 2,492 times.
- 66 super utilizers (10+ visits/year) had 1,024 visits.
- 19 ultra-utilizers (15+ visits/year) had 477 visits.

The average yearly charge total for patients who had ≥ 5 visits was \$14,235/year; for patients with 6-9 visits – \$20,790/year and for patients with ≥ 10 visits – \$45,385/year per patient.

THE CURRENT SYSTEM OF CARE FOR MAT-SU RESIDENTS

The complete array of services recommended by the Substance Abuse and Mental Health Services Administration (SAMHSA) to meet the needs of residents in crisis do not exist in the Mat-Su and access to many services requires private transportation to Anchorage. This results in the majority of residents who are in a behavioral health crisis seeing non-behavioral health professionals because they are accessing a system of care designed to treat physical health emergencies. Care provided in an ED is more expensive and often less effective than other types of care provided in nonhospital settings by behavioral health professionals.

■ In 2013, Mat-Su Health Services, a community behavioral health center, had 566 interactions with residents in crisis while there were 1,174 visits that were provided at the MSRMC ED for patients with a primary behavioral health diagnosis.

- Mat-Su emergency responders provided the following services:
 - State Troopers responded to 851 behavioral health incidents in 2013.
 - Between 2007 and 2013, EMS/ambulance responded an annual average of 432 behavioral health emergency calls.

The MSRMC ED has only two beds for patients in behavioral health crisis and when these beds are filled the hospital diverts law enforcement and ambulances to Anchorage hospitals. In 2012, MSRMC ED was on diversion status five times. In 2013, this number more than doubled (12 times). As of October 1, 2014, MSRMC ED has already been on diversion status 14 times.

Behavioral health providers in Mat-Su and Anchorage and professionals who make referrals for behavioral health services all feel there are gaps in services in Mat-Su. These gaps include lack of: substance abuse treatment, detox services, supportive housing, and crisis respite services. Providers also stated that many people in crisis do not have the following resources and support that would help them seek care: transportation, financial resources, supportive and helpful families, and other social support.

The non-behavioral health professionals who are responding to these residents felt they were not the best option of care for patients with severe behavioral health problems. Additionally, they felt there is not enough staffing and space to handle the number of people experiencing crisis in Mat-Su. Specifically, the MSRMC ED was mentioned as needing psychiatric consultation and more social work/behavioral health staff. Additionally, providers stated that communication and coordination between agencies within the current system could be improved. This includes improving collaboration with Anchorage providers of acute residential care. It was recognized that more behavioral health crisis services exist in Anchorage.



Mat-Su providers and referrers stated that if an individual has transportation to Anchorage, they would recommend that he/she go directly to the Providence Psych Emergency Department and bypass the MSRMC ED altogether.

WHO IS SEEN AT THE MSRMC ED?

In 2013, 2,391 residents went to the ED with a primary or subsequent behavioral health diagnosis:

- 13% were under 20 years; 15% were over 65 years; and 71% between 20 and 65 years;
- 55% female and 45% male;
- 29% had commercial insurance; 22%
 Medicaid; 22% Medicare; 27% were self-pay or other type of reimbursement;
- The majority of patients lived in three census tracts: Census Tract 12.02 (Palmer), Census Tract 6.04 (Wasilla), and Census Tract 8 (Knik Arm).

TYPES OF MENTAL/EMOTIONAL/SUBSTANCE ABUSE ISSUES SEEN AT THE MSRMC ED

The top five primary diagnoses related to behavioral health for MSRMC ED visits were:

- 1. Alcohol-related disorders
- 2. Suicide ideation, suicide attempts and intentionally inflicted self-injury
- 3. Anxiety disorders
- 4. Substance-related disorders
- 5. Mood disorders

When compared to national data, Mat-Su residents utilized the ED more frequently for suicide ideation and intentionally self-inflicted injury, and less often for mood disorders. Additionally, ED visits by patients over the age of 85 years presented fewer behavioral health concerns than nationally. A significant percentage of visits by patients seen at the ED had multiple behavioral health diagnoses.

Based on visits to the MSRMC ED, the most common primary behavioral health diagnosis varied by age:

- Children < 18 years suicide and self-inflicted injury;
- Adults 18-64 years alcohol-related disorders;
- Seniors > 65 years anxiety disorders.

Over half (56%) of MSRMC ED patients diagnosed with suicide ideation, attempted suicide, and self-inflicted injury were also diagnosed with a mood disorder in 2013.

POLICY-ACCESS AND ELIGIBILITY

In general, responsibility for the provision of the public behavioral health services rests with the Alaska Department of Health and Social Services (DHSS) and, through its responsibilities to manage the Mental Health Trust, the Alaska Mental Health Trust Authority. Services are primarily provided by state operated programs and facilities (for example, API) and providers under contract to DHSS, including community behavioral health service providers, Medicaid providers, and hospitals providing inpatient beds for individuals requiring involuntary commitment. The Division of Behavioral Health (DBH) provides Psychiatric Emergency Services (PES) grants designed to address community and individual needs for crisis response services. DBH also administers the Medicaid Program for behavioral health services.



The lack of access to appropriate crisis services and the disproportionate reliance on MSRMC and first responders, indicates there is no entity that is comprehensively assessing statewide and regional provision of services and prioritizing service needs. To decide on which programs receive PES grant funds and the amount of funding allocated, DBH relies on the grant application process, which includes the submission of a Community Action Plan by a coalition of local behavioral health grantees. Limited funding and lack of prioritization of service needs across the State limits the effectiveness of the system to provide appropriate services to individuals experiencing a behavioral health crisis.

In addition, the State's decision to not participate in the Medicaid Expansion provision of the Affordable Care Act (ACA) further limits resources. There are at least 2,150 Mat-Su residents who have some type of mental illness who would be eligible for Medicaid coverage under the ACA. A February 2014 report from the American Mental Health Counselors Association indicates, uninsured individuals with mental illness consistently forgo needed preventive and routine care, resulting in clinical deterioration to the point that they find themselves in crisis and need access to acute and expensive treatment.

FUNDING FOR CRISIS RESPONSE SERVICES

DBH receives State General Fund and federal block grant funds to fund Comprehensive Behavioral Health Centers (or "grantees") to provide psychiatric emergency services to all people in the grantee's service area who are in need of emergency behavioral health services, regardless of ability to pay. Psychiatric emergency services may include: crisis intervention; brief therapeutic interventions for stabilization; and family, consumer, and community wrap-around supports. Higher levels of acuity and severity may require referral to higher levels of care within the treatment continuum including API or a hospital also known as Designated

Evaluation & Stabilization (DES)/ Designated Evaluation & Treatment (DET) facility. In FY12-13, DBH made grant allocations for all Comprehensive Behavioral Health Treatment and Recovery (CBHTR) program types totaling approximately \$62.5 million. Of this amount, DBH allocated approximately \$6.0 million (or 10.4 percent) of this amount for PES grants. DBH indicates PES requests are entirely local grantee decisions, based on their analysis of the need for services and any other funding resources for the management of the remainder of their behavioral health grant programs. DBH indicates no grantee has been granted any substantial increase in many years, so the budgets they submit, by components or program types, may reflect their actual needs; however, when the time comes to award the grants, they are asked by the Division to amend their submitted budgets to basically not exceed their grant from the previous year, regardless of how much they may have requested in their original response to the Request for Proposals (RFP).

While it is not possible to definitively draw conclusions about the equity of PES grant funding allocations between service areas, comparative observations are possible. For example, the amount of PES funding per capita provided to the Palmer/Wasilla DBH service area, with a population totaling is 89,909 residents (\$2.66/capita), is far less than the amount provided to Fairbanks (\$9.11/capita) and Juneau (\$5.91/capita), the next two largest population centers, respectively. In addition, both Fairbanks and Juneau have DET beds, also funded by DBH through federal and State Disproportionate Share Hospital (DSH) funds. Anchorage receives \$4.06 per capita funding. While one may argue that the proximity of Mat Su to Anchorage serves to mitigate the need for an equivalent level of PES funding, the size of the Mat Su population, and the negative impacts the current crisis response situation is creating for individuals, providers, and first responders, provides evidence that additional PES funding is needed.



RECOMMENDATIONS

This analysis revealed a system for responding to behavioral health crises that is not meeting the needs of Mat-Su residents. The two contractor groups who contributed to this report, McDowell Group and WICHE, each provided "best practice" recommendations to further establish a working continuum of care focused on crisis prevention and treatment. A combination of these recommendations is found below.

PLANNING

RECOMMENDATION 1

Increase DBH's role in prioritizing service needs, based on local and regional needs.

RECOMMENDATION 2

Develop a behavioral health continuing care network of community-based providers that addresses: 1) acute intensive services including ED, inpatient and crisis stabilization, 2) intensive outpatient, and 3) community support. The network would help address several issues including: support initiatives that reduce patient costs of care and improve patient outcomes; oversee development and implementation of integrated processes and procedures among participating entities; jointly monitor key metrics related to behavioral health outcomes and quality measures; develop clinical- and patient-care pathways and supportive processes, tools, and systems to implement the pathways; consider health information technology and e-records to collect and share data (particularly for high utilizers).

FUNDING AND SERVICES

RECOMMENDATION 3A

Recommendation 3a: Fully maximize federal Medicaid Disproportionate Share Hospital (DSH) funding to increase the amount of funds available to increase behavioral health services provided to Alaska residents. The FY13 unused DSH allotment available to Alaska was \$10.5 million. If this amount had been matched by

50 percent state funding, the available additional DSH funding would have been \$21.1 million.

RECOMMENDATION 3B

Increase funding for Mat-Su crisis response services and consider a model to optimize funding, as well as adequately plan and prioritize services regionally, such as a non-profit Regional Behavioral Health Authority.

RECOMMENDATION 4

Establish the following services recommended in the SAMHSA proposed Good and Modern Addictions and Mental Health Service System in the Mat-Su Borough:

- A. Develop a single Crisis Hotline and Warm Line.
- B. Develop mobile crisis services that provide urgent behavioral healthcare.
- C. Develop a 12- to 16-Bed Crisis Stabilization and Respite Center with detox capacity.
- D. Develop an Urgent Care Behavioral Health Walk-In Clinic.
- E. Target high utilizers for case management services.
- F. Develop involuntary outpatient commitment and voluntary civil commitment services.

RECOMMENDATION 5

Recommendation 5: As an interim step until a 12-to-16-bed crisis stabilization and respite center can be funded and open in Mat-Su, the development of 4 to 6 dedicated psychiatric emergency evaluation and stabilization (DES) or treatment (DET) beds should be considered. Similar beds are currently located in Bethel and Ketchikan (DES) and Juneau and Fairbanks (DET). Per MSRMC Management,



since MSRMC is a physician-syndicated hospital and also because of the Affordable Care Act (ACA) regulations, there are restrictions that prevent expansion of the number of beds in the hospital. However, these restrictions may be lifted in 2017 when the physician syndication is dissolved. If, in 2017, a 12-16 bed stabilization unit does not exist or is not in the process of being developed and the ACA restriction no longer applies, MSRMC should consider adding 4-6 psychiatric beds.

RECOMMENDATION 6

As an interim step until Recommendations 4c or 5 are completed, the behavioral health capacity of the MSRMC ED should be developed with additional on-site behavioral health professionals. A 2013 PES funding proposal submitted by Mat-Su Health Services, the current PES grantee, suggested a staffing level of 2 full-time behavioral health clinicians supported by 2 full-time case management staff should be available in the ED during high volume periods 24 hours, 365 days per year. This level of staffing should be explored. Additionally, psychiatric consult should be available for MSRMC ED patients and inpatients with behavioral health diagnoses.

RECOMMENDATION 7

The State of Alaska should participate in the Medicaid Expansion Option under the ACA.

TRAINING AND BEST PRACTICES -**STATEWIDE**

RECOMMENDATION 8

Work with other Alaskan hospitals to adopt best practices to reduce unnecessary ED visits, such as those developed by a coalition of health care providers in Washington State. Consider similar provisions used by the coalition, including:

Provisions included:

- A. Adoption of a system to exchange patient information electronically among emergency departments.
- Adoption of a system to educate patients that the ED should be used only for true emergencies.
- C. Implementation of a process to disseminate lists of frequent users to hospital personnel to ensure they can be identified by the electronic information exchange system discussed above.
- D. Implementation of processes to assist frequent users with their care plans and to make appointments for these patients to see their primary care provider within 72-96 hours of their emergency room visit.
- E. Adoption of strict guidelines for the prescribing of narcotics. Hospitals have also attested they have trained ED physicians in how to enforce these guidelines.
- Enrollment of prescribers in the state's Prescription Monitoring Program (PMP).
- G. Designation of hospital personnel to review feedback reports regarding ED utilization and to take appropriate action in response to the information provided by those reports.



TRAINING AND BEST PRACTICES - LOCAL

RECOMMENDATION 9

Crisis Intervention Team training should be mandatory for a minimum number of law enforcement (including city police and Alaska State Troopers) and other emergency responders coming into contact with individuals experiencing a behavioral health crisis.

RECOMMENDATION 10A

Mat-Su staff and Mat-Su first responders should receive Trauma-Informed Care Training.

RECOMMENDATION 10B

MSRMC should consider the addition of a peer specialist position(s) located in the ED as part of the treatment team.

RECOMMENDATION 11

Adopt practices to address high utilization and bounce back of patients with behavioral health needs in the ED. These practices include assessing current behavioral health screening and discharge/follow-up procedures to ensure the use of best practices and coordination between professionals and agencies.

RECOMMENDATION 12

Expert consultant should be provided to existing Mat-Su crisis services to examine and advise on best practices for clinical and business aspects of providing crisis care and how to best promote and make services widely available to Mat-Su residents who are experiencing a crisis.

RECOMMENDATION 13

Community medical providers should have access to toolkits to identify the critical needs of suicidal patients.



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Mat-Su Health Foundation

Data for this report was provided by:

Alaska Mental Health Trust Authority
Alaska State Troopers

Matanuska Susitna Borough, Emergency Services Department
Mat-Su Health Services
Mat-Su Regional Medical Center
Palmer Police Department
Providence Health and Services Alaska
State of Alaska Department of Behavioral Health

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Mat-Su Behavioral Health Environmental Scan Report 1 – The Crisis Response System – Executive Summary

In 2013, as part of a Community Health Needs Assessment, professionals and residents ranked mental/emotional health and substance abuse issues (collectively referred to as behavioral health) as the highest priority health issues facing Mat-Su. The Mat-Su Health Foundation (MSHF), working closely with Mat-Su Regional Medical Center (MSRMC) and guided by a group of state and local leaders, sponsored a Behavioral Health Environmental Scan to examine the system that cares for Mat-Su residents. The Scan results will be released in three reports. This report examines the care that Mat-Su residents receive when they are experiencing a behavioral health crisis.

Methodology

The Scan included A Service Gap Analysis and Community Perceptions Study, conducted by Mat-Su Health Foundation, which used data collected from 65 in-depth interviews with crisis responders and other professionals. A Policy and Funding Analysis, conducted by the Western Interstate Commission on Higher Education (WICHE), examined state and federal statutes, rules, and funding data, as well as findings from 15 in-depth interviews with key statewide informants. An Emergency Response and "Hot Spot" Analysis, conducted by McDowell Group, examined patient, visit, diagnosis, charge (cost), and first-responder data to provide a snapshot of how the community uses the Mat-Su Regional Medical Center (MSRMC) Emergency Department (ED) and Urgent Care Clinic. GIS mapping was used to interpret the MSRMC ED and Mat-Su Borough socioeconomic data.

Findings

The Impact of Behavioral Health (BH)

Behavioral Health issues adversely affect lives, contribute to premature deaths, and cost money. The impacts on our community include:

- About one out of four motor vehicle accidents and other serious injuries requiring hospital care involve drugs and alcohol;
- Alcohol and substance abuse is suspected in almost half of all Mat-Su suicides and homicides;
- Mat-Su has a suicide death rate twice as high as the US rate, 23.2 deaths per 100,000 people vs. 11.3 for the US;
- In 2013, 20% of Mat-Su middle school students said they seriously considered suicide in the last year.

In 2013, the MSRMC ED served 2,391 patients with behavioral health diagnoses. These patients had 6053 visits during the year. The direct cost of providing emergency services for individuals with behavioral health needs in 2013 includes:

An estimated \$23 million in charges at the MSRMC ED ¹;

¹ The amount paid may be less than the hospital charge amount due to Medicare and Medicaid reimbursement rates, contractual allowances, charity care, and other reductions.

• An additional estimate of \$1.6 million spent on other parts of the response system such as law enforcement, 911 dispatch, transport, and services at API.

Charges for Medicare patients seen in the MSRMC ED in 2013 totaled approximately \$5.5 million while Medicaid patients had \$4.6 million dollars in charges. All of these costs do not include expenses for residents who went directly to Anchorage for care and bypassed the MSRMC ED. Mat-Su residents seen at the ED for mental/emotional crises or emergencies related to substance abuse or alcohol incur higher charges, more annual visits on average and longer stays, and are more likely to return to the hospital within 30 days compared to other patients.

Some behavioral health patients are high utilizers of services. In 2013:

- 305 high utilizer patients (5+ visits/year) with a behavioral health diagnosis visited the MSRMC ED 2,492 times.
- 66 super utilizers (10+ visits/year) had 1,024 visits.
- 19 ultra-utilizers (15+ visits/year) had 477 visits.

The average total yearly charges per patients for patients who had >5 visits per year was \$14,235; for patients with 6-9 visits - \$20,790; and for patients with >10 visits - \$45,385/year per patient.

The Current System of Care for Mat-Su Residents

The complete array of services recommended by the Substance Abuse and Mental Health Services Administration (SAMHSA) to meet the needs of residents in crisis do not exist in the Mat-Su and access to these types of services requires private transportation to Anchorage. This results in the majority of residents who are in a behavioral health crisis seeing non-behavioral health professionals because they are accessing a system of care designed to treat physical health emergencies. Care provided in an ED is more expensive and often less effective than other types of care provided in nonhospital settings by behavioral health professionals.

In 2013, Mat-Su Health Services, a community behavioral health center, had 566 interactions with residents in crisis while there were 1,174 visits that were provided at the MSRMC ED for patients with a primary BH diagnosis. Mat-Su emergency responders provided the following services:

- State Troopers responded to 851 behavioral health incidents in 2013
- Between 2007 and 2013, EMS/ambulance responded to an annual average of 432 behavioral health emergency calls.

The MSRMC ED has only two beds for patients in behavioral health crisis and when these beds are filled the hospital diverts law enforcement and ambulances to Anchorage hospitals. In 2012, MSRMC ED was on diversion status five times. In 2013, this number more than doubled (12 times). As of October 1, 2014, MSRMC ED has already been on diversion status 14 times.

Behavioral health providers in Mat-Su and Anchorage and professionals who make referrals for behavioral health services all feel there are gaps in services in Mat-Su. These gaps include lack of substance abuse treatment, detox services, supportive housing, and crisis respite services. Providers also stated that many people in crisis do not have the resources and support that would help them seek care such as transportation, financial resources, supportive and helpful families, and other social support.

The non-behavioral health professionals who are responding to these residents felt they were not the best option of care for patients with severe behavioral health problems. Additionally, they felt there is not enough staffing and space to handle the number of people experiencing crisis in Mat-Su. Specifically, the MSRMC ED was mentioned as needing psychiatric consultation and more social work/behavioral health staff. Additionally, providers stated that communication and coordination between agencies within the current system could be improved. This includes improving collaboration with Anchorage providers of acute residential care. It was recognized that more behavioral health crisis services exist in Anchorage. Mat-Su providers and referrers stated that if an individual has transportation to Anchorage, they would recommend that he/she go directly to the Providence Psych Emergency Room and bypass the MSRMC ED altogether.

Who is seen at the MSRMC ED?

In 2013, 2,391 Mat-Su Borough patients went to the ED with a primary or subsequent behavioral health diagnosis:

- 13% were under 20 years; 15% were over 65 years; and 71% between 20 and 65 years;
- 55% were female and 45% were male;
- 29% had commercial insurance; 22% Medicaid; 22% Medicare; 26% were self-pay or other type of reimbursement;
- The majority of patients lived in three census tracts: Census Tract 12.02 (Palmer), Census Tract 6.04 (Wasilla), and Census Tract 8 (Knik Arm).

Types of Mental/Emotional/Substance Abuse Issues Seen at the MSRMC ED

The top five primary diagnoses related to behavioral health for MSRMC ED visits were:

- 1. Alcohol-related disorders
- 2. Suicide ideation, suicide attempts, and intentionally inflicted self-injury
- 3. Anxiety disorders
- 4. Substance-related disorders
- 5. Mood disorders

When compared to national data, Mat-Su residents appear to use the ED more frequently for suicide ideation and intentionally self-inflicted injury, and less often for mood disorders. Additionally, ED visits by patients over the age of 85 years presented fewer behavioral health concerns than nationally. A significant percentage of visits by patients seen at the ED had multiple behavioral health diagnoses.

Based on visits to the MSRMC ED, the most common primary behavioral health diagnosis varied by age:

- Children < 18 years suicide and self-inflicted injury;
- Adults 18-64 years alcohol-related disorders;
- Seniors > 65 years anxiety disorders.

Over half (56 percent) of MSRMC ED patients diagnosed with suicidal ideation, attempted suicide, and self-inflicted injury were also diagnosed with a mood disorder in 2013.

Policy - Access and Eligibility

In general, responsibility for the provision of public behavioral health services rests with the Alaska Department of Health and Social Services (DHSS) and, through its responsibilities to manage the Mental Health Trust, the Alaska Mental Health Trust Authority. Services are primarily provided by state-operated programs and facilities (for example, API), and providers under contract to DHSS, including community behavioral health services providers, Medicaid providers, and hospitals providing inpatient beds for individuals requiring involuntary commitment. The Division of Behavioral Health (DBH) provides Psychiatric Emergency Services (PES) grants designed to address community and individual needs for crisis response services, and DBH also administers the Medicaid program for behavioral health services.

The lack of access to appropriate crisis response services in Mat-Su, and the disproportionate reliance on the MSRMC and first responders, indicates there is no entity that is comprehensively assessing statewide and regional provision of services and prioritizing service needs. To decide on which programs receive PES grant funds and the amount of funding allocated, DBH relies on the grant application process, which includes the submission of a Community Action Plan by a coalition of local behavioral health grantees. Limited funding and lack of prioritization of service needs across the State limits the effectiveness of the system to provide appropriate services to individuals experiencing a behavioral health crisis.

In addition, the State's decision to not participate in the Medicaid expansion provision of the Affordable Care Act (ACA) further limits resources. There are at least 2,150 Mat-Su residents who have some type of mental illness who would be eligible for Medicaid coverage under the ACA. A February 2014 report from the American Mental Health Counselors Association indicates uninsured individuals with mental illness consistently forgo needed preventive and routine care, resulting in clinical deterioration to the point that they find themselves in crisis and need access to acute and expensive treatment.

Funding for Crisis Response Services

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In FY12-13, DBH made grant allocations for all Comprehensive Behavioral Health Treatment and Recovery Grant Program types totaling approximately \$62.5 million. Of this amount, DBH allocated approximately \$6.0 million (or 10.4 percent) of this amount for PES grants. DBH indicates PES requests are entirely local grantee decisions, based on their analysis of the need for services and any other funding resources for the management of the remainder of their behavioral health grant programs. DBH indicates no grantee has been granted any substantial increase in many years, so the budgets they submit, by components or program types, may reflect their actual needs; however, when the time comes to award the grants, they are asked by the Division to amend their submitted

budgets to basically not exceed their grant from the previous year, regardless of how much they may have requested in their original response to the Request for Proposals (RFP).

While it is not possible to definitively draw conclusions about the equity of PES grant funding allocations between service areas, comparative observations are possible. For example, the amount of PES funding per capita provided to the Palmer/Wasilla DBH service area, with a population totaling is 96,074 residents (\$2.66/capita), is far less than the amount provided to Fairbanks (\$9.11/capita) and Juneau (\$5.91/capita), the next two largest population centers, respectively. In addition, both Fairbanks and Juneau have DET beds, also funded by DBH through federal and State Disproportionate Share Hospital funds. Anchorage receives \$4.06 per capita funding. While one may argue that the proximity of Mat Su to Anchorage serves to mitigate the need for an equivalent level of PES funding, the size of the Mat Su population, and the negative impacts the current crisis response situation is creating for individuals, providers, and first responders, argues that additional funding is needed.

Recommendations

This analysis revealed a system for responding to behavioral health crises that is not meeting the needs of Mat-Su residents. The two contractor groups who contributed to this report, McDowell Group and WICHE, each provided "best practice" recommendations to further establish a working continuum of care focused on crisis prevention and treatment. A combination of these recommendations is found below.

Planning

Recommendation 1: Increase DBH's role in prioritizing service needs based on local and regional data.

Recommendation 2: Develop a BH continuing care network of community-based providers that addresses: 1) acute, intensive services including emergent, inpatient and crisis stabilization, 2) Intensive Outpatient, and 3) Community Support. The network would help address several issues, including: support initiatives that reduce patient costs of care and improve patient outcomes; oversee development and implementation of integrated processes and procedures among participating entities; jointly monitor key metrics related to behavioral health outcomes and quality measures; develop clinical and patient-care pathways and supportive processes, tools, and systems to implement the pathways; and consider health information technology and e-records to collect and share data (particularly for high utilizers).

Funding and Services

Recommendation 3a: Fully maximize federal Medicaid Disproportionate Share Hospital (DSH) funding to increase the amount of funds available to increase behavioral health services provided to Alaska residents. The FY13 unused DSH allotment available to Alaska was \$10.5 million. If this amount had been matched by 50 percent state funding, the available additional DSH funding would have been \$21.1 million.

Recommendation 3b: Increase funding for Mat-Su crisis response services and consider, a model to optimize funding, as well as adequately plan and prioritize services regionally, such as a non-profit Regional Behavioral Health Authority.

Recommendation 4: Establish the following services recommended in the SAMHSA proposed <u>Good</u> and Modern Addictions and Mental Health Service System model in the Mat-Su Borough:

- a) Develop a single Crisis Hotline and Warm Line.
- b) Develop Mobile Crisis services that provide urgent behavioral healthcare.
- c) Develop a 12- to 16- Bed Crisis Stabilization and Respite Center with detox capacity.
- d) Develop an Urgent Care Behavioral Health Walk-In Clinic.
- e) Target high utilizers for case management services.
- f) Develop involuntary outpatient commitment and voluntary civil commitment services.

Recommendation 5: As an interim step until a 12- to 16-bed crisis stabilization and respite center can be funded and open in Mat-Su, the development of four to six dedicated psychiatric emergency evaluation and stabilization (DES) or treatment (DET) beds should be considered. Similar beds are currently located in Bethel and Ketchikan (DES) and Juneau and Fairbanks (DET). Per MSRMC Management, since MSRMC is a physician-syndicated hospital and also because of the Affordable Care Act (ACA) regulations, there are restrictions that prevent expansion of the number of beds in the hospital. However, these restrictions may be lifted in 2017 when the physician syndication is dissolved. If, in 2017, a 12-16 bed stabilization unit does not exist or is not in the process of being developed and the ACA restriction no longer applies, MSRMC should consider adding four to six psychiatric beds.

Recommendation 6: As an interim step until Recommendations 4c and 5 are completed, the behavioral health capacity of the MSRMC ED should be developed with additional on-site behavioral health professionals. A 2013 PES funding proposal submitted by Mat-Su Health Services, the current PES grantee, suggested a staffing level of 2 full-time behavioral health clinicians supported by 2 full-time case management staff should be available in the ED during high volume periods 24 hours, 365 days per year. This level of staffing should be explored. Additionally, psychiatric consult should be available for MSRMC ED patients and inpatients with behavioral health diagnoses.

Recommendation 7: The State of Alaska should participate in the Medicaid Expansion Option under the ACA.

TRAINING AND BEST PRACTICES - STATEWIDE

Recommendation 8: Work with other Alaskan hospitals to adopt best practices to reduce unnecessary ED visits, such as those developed by a coalition of health care providers in Washington State. Consider similar provisions used by the coalition, including:

- a) Adoption of a system to exchange patient information electronically among emergency departments.
- b) Adoption of a system to educate patients that the ED should be used only for true emergencies.
- c) Implementation of a process to disseminate lists of frequent users to hospital personnel to ensure they can be identified by the electronic information exchange system discussed above.

- d) Implementation of processes to assist frequent users with their care plans and to make appointments for these patients to see their primary care provider within 72-96 hours of their emergency room visit.
- e) Adoption of strict guidelines for the prescribing of narcotics. Hospitals have also attested they have trained ED physicians in how to enforce these guidelines.
- f) Enrollment of ED prescribers in the state's Prescription Monitoring Program.
- g) Designation of hospital personnel to review feedback reports regarding ED utilization and to take appropriate action in response to the information provided by those reports.

TRAINING AND BEST PRACTICES - LOCAL

Recommendation 9: Crisis Intervention Team training should be mandatory for a minimum number of law enforcement (including city police and Alaska State Troopers) and other emergency responders coming into contact with individuals experiencing a BH crisis.

Recommendations 10: a) MSRMC staff and Mat-Su first responders should receive Trauma-Informed Care Training. b) Additionally, MSRMC should consider the addition of a peer specialist position(s) located in the ED as part of the treatment team.

Recommendations 11: Adopt practices to address high utilization and bounce back of behavioral health patients in the ED. These practices include assessing current behavioral health screening and discharge/follow-up procedures to ensure the use of best practices and coordination between professionals and agencies.

Recommendation 12: Expert consultation should be provided to existing Mat-Su crisis services to examine and advise on best practices for clinical and business aspects of providing crisis care and how to best promote and make services widely available to Mat-Su residents who are experiencing a crisis.

Recommendation 13: Community medical providers should have access to toolkits to identify the critical needs of suicidal patients.

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Behavioral Health: Behavioral health includes an individual's mental and emotional health, including any abuse of alcohol, non-prescribed drugs, and illegal substances. In this report, the analysis of the ED and UC data is based on behavioral health (BH) as defined by the ICD-9 diagnostic codes in the medical record. Using the Agency for Healthcare Research and Quality (AHRQ) Clinical Classification Software (CCS) definitions, a visit is considered to be related to BH if any of the associated diagnoses are within one of 13 CCS groups related to mental health or alcohol/substance abuse (see table below).

- Mental Health: A subset of BH, mental health, in the context of this analysis, is defined as one of 12 CCS groups. These include all the BH diagnostic groups except the alcohol and substance-related disorders.
- **Substance Abuse:** Two CCS diagnostic groups are specific to alcohol and substance abuse: Alcohol-related disorders and Substance-related disorders.

Table 1. Clinical Classification Software Groups for Behavioral Health

Code	Description		
Mental Health CCS Groups			
0650	Adjustment disorders		
0651	Anxiety disorders		
0652	Attention-deficit, conduct, and disruptive behavior disorders		
0653	Delirium, dementia, and amnestic and other cognitive disorders		
0654	Developmental disorders		
0655	Disorders usually diagnosed in infancy, childhood, or adolescence		
0656	Impulse control disorders, NEC		
0657	Mood disorders		
0658	Personality disorders		
0659	Schizophrenia and other psychotic disorders		
0662	Suicide and intentional self-inflicted injury		
0670	Miscellaneous disorders		
Substance Abuse CCS Groups			
0660	Alcohol-related disorders		
0661	Substance-related disorders		

Source: AHRQ, 2013

Behavioral Health (BH) Patient: A BH patient is an individual who had at least one visit during 2013 associated with a BH diagnosis.

BH Visit: A visit is considered a BH visit if it involves a BH diagnosis.

Dual Diagnosis: A diagnosis that includes both mental illness and substance use disorder.

Emergency Department (ED) Charges: ED charges refer to all the charges associated with an emergency room visit prior to the patient being admitted or transferred. In addition to the emergency department, charges for services from other hospital departments - such as diagnostic, imaging, and pharmacy - are included. ED charges do not include charges or costs for physician services provided in the ER. The amount paid may be less than the hospital charge amount due to

Medicare and Medicaid reimbursement rates, contractual allowances, charity care, and other reductions.

High Utilizer: A high-utilizer is defined as a patient with five or more ED visits during 2013.

Insurance Type: Insurance Type refers to the primary insurance of the patient. Insurance coverage is grouped into Commercial/Private insurance, Medicare, Medicaid, Self-Pay, and Other. "Self-Pay" includes patients who either paid directly, were uninsured, received charity care, or had bad debt. "Other" includes Tricare, Veteran's Administration, and Workers' Compensation. For patients with multiple visits identifying more than one primary insurer, the majority of visits determined the insurance type. "Unknown" includes patients whose primary insurance was not designated because they had an equal number of visits with different insurers and also includes patients with an insurance descriptor of "Unknown."

Length of Stay: Length of Stay (LOS) is the duration of time a patient spends in the ED. In most cases, LOS is reported only for patients discharged or transferred from the ED and not for patients admitted to the hospital for a longer stay.

Patient: A patient is an individual who had one or more visits to the ED during the period analyzed (2013).

Primary Diagnosis: The primary diagnosis is, in the opinion of the emergency physician, the main reason for the ED visit.

Subsequent Diagnosis: In addition to the Primary Diagnosis, a patient may be diagnosed with multiple other conditions. The MSRMC ED/UC dataset included 13 diagnostic codes besides the Primary Diagnosis. These codes include concurrent diagnoses and some procedure codes - such as screening tools - that also apply during the visit.

Super Utilizer: A super-utilizer is defined as a patient with 10 or more ED visits during 2013.

Ultra Utilizer: An ultra-utilizer is defined as a patient with 15 or more ED visits during 2013.

Visit: A visit is the encounter summarized in the MSRMC ED dataset. Every visit begins in the ED and ends when the patient is no longer at MSRMC (discharged or transferred).

List of Abbreviations

ACS American Community Survey

ADOLWD Alaska Department of Labor and Workforce Development

AHRQ Agency for Healthcare Quality and Research

API Alaska Psychiatric Institute

AS Alaska Statute

AST Alaska State Troopers

AMHTA Alaska Mental Health Trust Authority

CBHC Community Behavioral Health Center

CBHTR Comprehensive Behavioral Health Treatment and Recovery Grant Program

CBOC Community-based Outpatient Clinic

CCS Clinical Classification Software

CHNA Community Health Needs Assessment

BH Behavioral Health

BHCRS Behavioral Health Crisis Response System

DBH Division of Behavioral Health

DES Designated Evaluation and Stabilization program

DET Designated Evaluation and Treatment program

DHHS Department of Health and Human Services

DSH Disproportionate Share Hospital funding

DUI Driving under the influence

ED Emergency Department

EDC Emergency Dispatch Center

EMS Emergency Medical Services

EMTALA Emergency Medical Treatment and Labor Act

EMT Emergency Medical Treatment

ESN Emergency Services Number

IMD Institutes for Mental Disease

LIMHP Licensed Independent Mental Health Practitioner

LOS Length of Stay

MHPC Mental Health Professional Clinician

MSHF Mat-Su Health Foundation

MSRMC ED Mat-Su Regional Medical Center Emergency Department

MSR UC Mat-Su Regional Urgent Care

MSHS Mat-Su Health Services

NAMI National Alliance on Mental Illness

PCRC Providence Crisis Recovery Center

PES Psychiatric Emergency Services

PPED Providence Psychiatric Emergency Department

SAMHSA Substance Abuse and Mental Health Services Administration

SED Severe Emotional Disturbance

SMI Severe Mental Illness

SUD Substance Use Disorder

In 2013, the Mat-Su Health Foundation and community partners conducted a Mat-Su Community Health Needs Assessment (CHNA). The full Mat-Su CHNA can be viewed at www.healthymatsu.org. As part of the CHNA process, 23 meetings were held across the borough, where more than 500 Mat-Su residents and professionals participated and ranked the following as the top two health and wellness goals for Mat-Su.

- 1. All Mat-Su children are safe and well cared for.
- 2. All Mat-Su residents are drug free (illegal drugs) and sober or drink responsibly.

Both of these goals relate to promoting optimal behavioral health (BH) for Mat-Su residents. BH refers to mental and emotional health, including the use of non-prescribed drugs and illegal substances. Promoting optimal BH sometimes includes providing treatment for substance abuse and/or mental and emotional health challenges. It also means creating a supportive environment where children live in families without violence or substance abuse, and with parents who themselves are healthy and happy.

At the community meetings, overwhelming consensus was revealed about Mat-Su's greatest health challenges which are described below.

- Alcohol and Substance Abuse: The community views this as the leading health challenge.
 From 2005-2009, this issue led to approximately 12 alcohol-induced deaths and 18 druginduced deaths each year (Hull-Jilly DMC, 2011). Additionally, from 1991-2011, 22% of
 injuries requiring hospital care were related to substance abuse and alcohol (Alaska Tumor
 Registry, 2013).
- <u>Children Experiencing Trauma and Violence:</u> This issue is directly related to Mat-Su's leading goal to keep children safe and well cared for. In 2012, the Mat-Su Office of Children's Services received 1,625 protective service reports of child maltreatment and had 420 substantiated allegations (Bolles, 2013). In 2013, the Office of Children's Services received at least one report of child maltreatment for 396 Mat-Su children between the ages of 0-4 years. (Parrish, 2014). In 2013, one in five Mat-Su middle school students reported being bullied in the last year (Oliver, 2014).
- <u>Depression and Suicide:</u> From 2007-2009, the Mat-Su suicide death rate is twice as high as the US rate (Alaska Bureau of Vital Statistics, 2014). Additionally in 2013, 20 percent of Mat-Su middle school students reported seriously considering suicide in the last year (Oliver, 2014).
- <u>Domestic Violence and Sexual Assault:</u> In 2013, 53% percent of adult women in Mat-Su reported having experienced intimate partner violence, sexual assault or both at some point in their lives (Council on Domestic Violence and Sexual Assault, 2013).
- BH Care System in Need of Repair: According to attendees at the 2013 community meetings, children, families, and individuals are not getting the counseling, addiction treatment, and other services they need. There are long waiting lists, especially for children, and lack of money and transportation prevent many people from getting services.

To better understand how the treatment system is functioning and what can be done to fix areas that are not working, the Mat-Su Health Foundation in cooperation with Mat-Su's BH providers launched a Behavioral Health Environmental Scan (BHES). The following contractors were engaged to help complete the BHES: McDowell Group and Western Interstate Commission for Higher Education (WICHE). Additionally, the MSHF hired a Community Health Fellow, Megan Villwock, MPH, and MS, to assist with the Scan. The Scan results will be presented in three reports:

- Part 1 The Crisis Response System
- Part 2 The Behavioral Health Treatment System
- Part 3 Promoting Healthy Foundations for Families.

This report will examine the Mat-Su Emergency Behavioral Health Crisis Response System which is a subset of a full Behavioral Health Treatment System. The federal Substance Abuse and Mental Health Services Administration (SAMHSA, 2014) has identified several types of non-hospital-based programs aimed at addressing the needs of individuals experiencing behavioral health crises. These programs are ideal and when they are not present the system that addresses physical health emergencies is the default place of care for individuals experiencing crises related to mental health and alcohol and substance use. In the last 25 years, the use of emergency rooms for behavioral health crises has grown. There was a 15 percent increase in psychiatric emergency room visits from 1992-2000. It is theorized that this increase in use was due to the trend in deinstitutionalization of individuals with mental health needs, limited outpatient resources, and an increase in substance abuse. From 2004-2008, visits to the ED for opioid use more than doubled (Health Partners, 2012). In 2010, there were 6.4 million visits to the ED nationally and about five percent involved patients whose primary diagnosis was related to mental health or substance abuse (Creswell, 2013).

The use of EDs for general non-crisis healthcare remains an issue for individuals with all types of health needs and leads to ED overcrowding. Patients who seek general medical care in the ED often do so due to barriers in timely access to care at outpatient clinics, lack of evening and weekend appointments, inconvenient office hours, workforce shortages, inability to afford copays, and lack of providers who bill Medicaid (Rust, et al., 2008) (Cunningham, 2006). Although individuals with behavioral health needs may use the ED for general medical care, the trend in increased use is often seen as a proxy measure for failure of the outpatient behavioral health system to meet the complex needs of patients (Pasic, Russo, & Roy-Byrne, 2005). The insufficiency of the mental healthcare system is further evidenced by the increasing frequency at which patients with mental health needs are "boarded" in the emergency room when inpatient beds are unavailable. A recent study by Simpson, et al. demonstrated that boarders are more likely to have diagnoses of primary psychosis, anxiety, or personality disorder or bipolar manic/mixed episode. They are more likely to have been referred by family or friend than self and they often arrive in restraints, experience restraint/seclusion, or be referred for involuntary hospitalization (Simpson, Jutta, West, & Pasic, 2014). Many of these national trends are reflected at a local level in Mat-Su as evidenced by the data presented in this report.

The Matanuska Susitna Borough, located approximately 40 miles northeast of Anchorage, contains 27 communities and encompasses 24,682 square miles. It includes three incorporated cities (Wasilla, Palmer, and Houston) and 25 unincorporated regions or Census Designated Places. Most of the communities - including Willow, Houston, Big Lake, Meadow Lakes, Sutton, and Chickaloon - are located within 30 miles of either Palmer or Wasilla. Talkeetna and Trapper Creek are the most distant communities on the road system from the borough's population center. According to the Alaska Department of Labor and Workforce Development (ADOLWD) in 2011 approximately one-third of Mat-Su residents commuted to Anchorage for employment.

In 2013, Mat-Su had a population of 96,074, an increase of eight percent from the 2010 US Census and a 62 percent increase from the 2000 U.S. Census. In 2013, the median age for the borough was 35.2 years, with nine percent of the population over the age of 65 and 31 percent of the population under 19 years of age. There were 31,824 households, with an average household size of 2.75 residents and an average family size of 3.23 residents. The two largest communities in the borough, Palmer and Wasilla, had populations of 6,085 and 8,365 residents, respectively. Their populations have increased approximately five percent since 2010. Since 2000, Palmer has grown 29 percent and Wasilla 52 percent. According to the 2010 US Census, nine percent of Palmer residents and five percent of Wasilla residents identify as Alaska Native/American Indian, not including those who identify with two or more races.

Table 2. Demographic Information Mat-Su, Palmer, Wasilla, Alaska - 2010, 2013

	Mat-Su	Palmer	Wasilla	Alaska
2013 ADOLWD				
Population estimate	96,074	6,085	8,365	736,399
% Population change since 2010	8.0%	2.5%	6.8%	3.7%
% Population change since 2000	62.0%	29.3%	52.0%	17.5%
Median age (Years)	35.2	31.1	33.6	34.3
% Population 65 + years	9.3%	10.3%	11.7%	9.2%
% Population under 19 years	31.0%	32.6%	31.8%	28.4%
2010 US Census				
% Population Alaska Native/American Indian*	5.5%	9.2%	5.2%	14.8%
Number of households	31,824	2,113	2,962	258,058
Average household size (Residents)	2.75	2.61	2.61	2.7
Average family size (Residents)	3.23	3.28	3.21	3.2

Source: ADOLWD and US Census Bureau.

^{*}Percentage does not include individuals who report themselves as identifying with two or more races.

Population by Community

The following table shows ADOLWD population estimates for communities in the Mat-Su, and the percent change in population from 2000 to 2013. In 2013, the ten largest communities (in order of decreasing population) were Knik-Fairview, Tanaina, Lakes, Wasilla, Meadow Lakes, Gateway, Palmer, Fishhook, Big Lake, and Butte. Seventeen of the communities have populations of more than 1,000. The map below shows the population density throughout the borough. Additional demographic information about Mat-Su can be found in Appendix A.

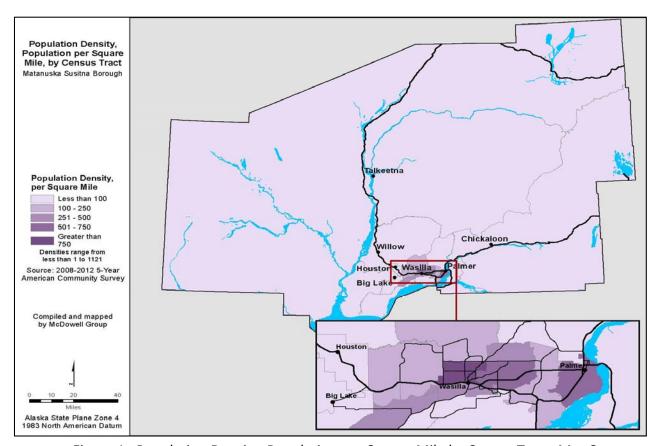


Figure 1. Population Density, Population per Square Mile by Census Tract, Mat-Su

Table 3. Mat-Su Communities, 2000 US Census, 2011 and 2013 ADOLWD Population Estimates

Community	2000 Population	2011 Population	2013 Population	
Knik-Fairview CDP	6,985	15,588	16,321	134%
Tanaina CDP	5,056	8,411	8,875	76
Lakes CDP	6,604	8,612	8,788	33
Wasilla City	5,504	8,064	8,365	52
Meadow Lakes CDP	4,720	7,918	8,259	75
Gateway CDP	3,802	5,680	6,193	63
Palmer City	4,705	6,087	6,085	29
Fishhook CDP	2,565	4,757	5,093	99
Big Lake CDP	2,435	3,399	3,590	47
Butte CDP	2,561	3,274	3,409	33
Willow CDP	1,657	2,156	2,118	28
Houston City	1,202	1,945	2,039	70
Lazy Mountain CDP	1,160	1,471	1,526	32
Point MacKenzie CDP	226	632	1,517	571
Sutton-Alpine CDP	1,080	1,492	1,428	32
Susitna North CDP	985	1,323	1,380	40
Farm Loop CDP	975	1,032	1,104	13
Buffalo Soapstone CDP	761	876	870	14
Talkeetna CDP	731	896	861	18
Knik River CDP	582	760	745	28
Trapper Creek CDP	423	499	475	12
Chickaloon CDP	213	270	244	15
Glacier View CDP	238	239	235	-1
Lake Louise CDP	88	51	53	-40
Chase CDP	43	32	42	-2
Skwentna CDP	111	30	33	-70
Eureka Roadhouse CDP	28	24	19	-32
Susitna CDP	37	17	13	-65
Petersville CDP	16	5	3	-81
Balance	3,829	6,157	6,391	67

Source: ADOLWD and US Census

Methodology

Interviews were conducted in 2014 with representatives from agencies who are part of the Mat-Su and Anchorage BH Crisis Response System. These interviews, which lasted from 1 to 2 hours, were recorded and transcribed and the content analyzed using NVIVO qualitative analysis software. Representatives from the following agencies were interviewed:

- Alaska Psychiatric Institute (API)
- Alaska State Troopers, "B" Detachment
- Mat-Su Borough Department of Emergency Medical Services
- Mat-Su Regional Medical Center (MSRMC) emergency physicians, nurse and social worker
- Mat-Su Health Services, recipient of a State of Alaska Psychiatric Emergency Services Grant
- Mat-Su Pretrial
- North Star Hospital
- Palmer Police Department
- Providence Psychiatric Emergency Department
- Providence Crisis Recovery Center
- Providence Mental Health Unit and Providence Inpatient Acute Adolescent Program
- Wasilla Police Department

A Good and Modern Addictions and Mental Health Service System

A continuum of crisis services for individuals experiencing a BH emergency strives to stabilize and improve the psychological and physical symptoms of distress and addiction and link individuals with appropriate treatment services to address the situation that led to the crisis in the first place. A functional continuum of care includes services to address a crisis before it becomes full blown, direct individuals to the proper level of care, and work to prevent future crises. The system should provide a wide range of crisis stabilization options that focus on quickly stabilizing and returning individuals to their pre-crisis level of functioning. Additionally, an ideal system promotes continued independent living and community integration, while increasing the individual's ability to recognize and handle situations before they become a crisis. This would include improving their network of community, social, and crisis-prevention supports (Evette Jackson, 2005).

In 2011, the Substance Abuse and Mental Health Services Administration (SAMHSA) proposed a "Good and Modern Addictions and Mental Health Service System" model as an ideal continuum of care for BH services (SAMHSA, 2011). Table 4. lists The Good and Modern Addictions and Mental Health Services System Model recommendations for BH crisis response. Appendix F contains an overview of the full continuum of care.

Table 4. Examples of Components of a BH Crisis Response Continuum of Care

Services*	Description	Purpose
Crisis hotline services - 24/7	A free telephone service that provides immediate support and facilitated referrals for a person experiencing distress.	To provide support and a plan for coping for individuals who feel hopeless and overwhelmed.
Crisis stabilization services/observation beds	23-hour supervised care to de-escalate the severity of an individual's crisis and need for urgent care.	To avoid unnecessary hospitalization for persons whose crisis may resolve with time and observation.
Medically monitored intensive inpatient	A substance abuse treatment program that provides a planned regimen of 24-hour professionally directed evaluation, observation, medical monitoring, and addiction treatment in an inpatient setting.	To provide care to patients with severe sub- acute detoxification, withdrawal, and other BH problems that require inpatient treatment, but not an acute general hospital or medically managed inpatient treatment program.
Mobile crisis services	Services provided in the community, including within an individual's own home, which begin the process of assessment and definitive treatment. Staffing includes the availability of a psychiatrist by phone or in person for assessment.	To provide rapid response, assessment, and resolution of crisis situations in an effort to reduce psychiatric hospitalizations and/or arrests of mentally ill offenders.
Peer-based crisis services	Support services that occur in community settings and are operated by staff who are mental health consumers. These short-term crisis (<24-hours to several days) services offer a calm environment in the community with medical support.	To provide a peer-led intervention that combined with community outreach is an option instead of standard hospital care.
Short-term crisis residential services	Provision of housing during a crisis with services that meet the needs of an individual with acute psychiatric distress and provide a safe environment for care and recovery.	To prevent or ameliorate a BH crisis and/or reduce acute symptoms of mental illness while avoiding hospitalization.
Walk-in/urgent care crisis services	Walk-in outpatient services that include screening and assessment, crisis stabilization including medication, brief treatment and referral for services.	To provide immediate care and access to services and support for individuals in psychiatric crisis.
Warm line	A telephone service staffed by mental health consumers and people in recovery that provide a message of hope and information on available resources.	To offer a person in distress who is not in a full crisis compassion and support to prevent an escalation to a crisis-related trip to a local emergency department.

^{*}Recommended in SAMHSA Good and Modern Addictions and Mental Health Services System

The Good and Modern Addictions and Mental Health Service System model was proposed to describe the basic services required for a continuum of effective treatment and support that span healthcare, employment, housing, and educational sectors. The model was proposed to: "Provide clarity to federal agencies that regulate or purchase services for individuals with mental and substance use disorders; offer guidance to agencies that are presently making decisions about expanding services to these populations; and assist in planning possible changes to the Substance Abuse Prevention and Treatment Block Grant and the Mental Health Services Block Grant" (SAMHSA, 2014).

A SAMHSA report on crisis response services states that: "There is evidence that crisis stabilization, community-based residential crisis care, and mobile crisis services can divert individuals from

unnecessary hospitalization and ensure the least restrictive treatment option is available to people experiencing BH crises. Additionally, a continuum of crisis services can assist in reducing costs for psychiatric hospitalization, without negatively impacting clinical outcomes" (SAMHSA, 2014).

Description of the Mat-Su BH Crisis Response System

The system of care for Mat-Su residents experiencing a BH crisis follows several patterns that involve the following partners.

In Mat-Su

- 911 Emergency System, which includes the dispatch centers Palmer Emergency Dispatch Center (EDC) and Mat-Com
- Matanuska Susitna Borough Emergency Medical Services (EMS)
- Law Enforcement: Alaska State Troopers, Palmer Police Department, and Wasilla Police Department
- Alaska Department of Corrections, Mat-Su Pretrial
- Mat-Su Health Services (MSHS)
- Mat-Su Regional Medical Center Emergency Department (MSRMC ED)

In Anchorage

- Providence Psychiatric Emergency Department (PPED)
- Alaska Psychiatric Institute (API)
- Providence Crisis Recovery Center (PCRC)
- Anchorage in-patient acute care providers, which include Providence Mental Health Unit, Providence Discovery Unit, and North Star Hospital.

Palmer Emergency Dispatch and Mat-Com

A 911 call may be a critical point of contact to obtain services for an individual experiencing a BH emergency. There are two emergency dispatch centers that handle 911 calls within Mat-Su. The Palmer Emergency Dispatch Center (EDC), run by the City of Palmer, is the central dispatch facility for Palmer police and Mat-Su Borough fire and emergency medical services. This dispatch center handles all the calls for the 11 fire departments and 10 ambulance services for an area of 25,260 square miles (Palmer, City of, 2014).

The other dispatch center, Mat-Com, dispatches for the Alaska State Troopers, Alaska Wildlife Troopers, and the Wasilla Police Department. Mat-Com works closely with Palmer EDC. All 911 calls first go to Palmer, where the dispatchers screen each call. Palmer EDC manages the calls that relate to fire, emergency medical services, or law enforcement within the Palmer city limits. If a call requires a law enforcement and/or EMS response and is outside of the jurisdiction of Palmer, the Palmer EDC initiates a phone-call triangle with Mat-Com in order to coordinate a response.

Dispatchers follow a specific script asking callers standardized questions based on the nature of their call. The dispatchers coordinate the response of law enforcement and EMS for a single call if it appears that there is a BH or medical emergency that may threaten the safety of the EMS responder. If this is the case, the EMS responder will not proceed to the call until appropriate law enforcement

personnel are on location to ensure that the scene is safe for responders. The BH-related calls that both dispatch centers handle include drug overdose, driving while intoxicated or drugged, severe intoxication, mental health crises including suicide threats or attempts, and missing person cases involving vulnerable adults (MatCom, 2014).

Matanuska Susitna Borough Emergency Medical Services (EMS)

The Mat-Su EMS system is staffed by a combination of paid on-call responders and full-time paramedics. There are ambulance services in all Mat-Su communities, including Trapper Creek, Talkeetna, Willow, Butte, and Sutton. Lake Louise is a first response area but does not have a licensed ambulance service. In the rural communities, the responders are paid when they are called in and for the time that they are on call. Core EMS responders oversee operations in Houston, Wasilla, Big Lake, Meadow Lakes, and Palmer. The core area is staffed by both on-call responders and ten full time paramedics.

Law Enforcement

There are three law enforcement agencies that cover Mat-Su. The Wasilla Police Department serves a city of approximately 8,365 residents. The Palmer Police Department provides services to approximately 6,085 residents. The Division of Alaska State Troopers (AST) detachment that includes the Mat-Su Borough is called "B Detachment" and includes posts in Glennallen, Palmer/Mat-Su West, and Talkeetna. AST provides services in all areas of the borough not including the city limits of Palmer and Wasilla. All agencies work together when necessary to provide law enforcement and emergency assistance.

Law enforcement officers in Mat-Su play a large role in BH emergencies due to requirements under Alaska Statute - Section 47.30.705 which states that: "A peace officer who is licensed to practice in the state who has probable cause to believe that a person is gravely disabled or is suffering from mental illness and is likely to cause serious harm to self or others of such immediate nature that considerations of safety do not allow the initiation of involuntary commitment procedures set out in AS 47.30.700, may cause the person to be taken into custody and delivered to the nearest evaluation facility."

When law enforcement use this statute to take a person into custody and deliver them to an evaluation facility (MSRMC ED or Mat-Su Pretrial), they refer to it as a "Title 47 hold." For the purposes of this report, "Title 47 hold" will refer to this practice. After arriving at the evaluation facility, the individual will be examined and evaluated as to their mental and physical condition within 24 hours by a mental health professional and a physician. If the person is found to be gravely disabled or presents a likelihood of serious harm to self or others, and in need of care or treatment the mental health professional will apply for an order authorizing a 72-hour hospitalization for evaluation, known as an "ex-parte."

In Mat-Su, law enforcement are called to respond to several different types of BH emergencies related to either substance abuse or mental illness or both. These include the following:

- An individual in a public place who is severely impaired due to alcohol or substance abuse;
- An individual who is making suicidal threats or having suicidal ideations;
- An individual who is at home or in a public place acting inappropriately and/or in a threatening manner;

- A student who is behaving in an aggressive manner at school and the staff need assistance;
- A vulnerable adult under supervision of a guardian who wanders off from an assisted living home or their own home;
- A vulnerable adult who has assaulted or fled from their caregiver.

A typical Title 47 order involves alcohol impairment when a person is at a point where they cannot take care of themselves (Palmer, 2014). Law enforcement will try to find a friend or family member who can take care of the person. If the officer cannot find a responsible party to take care of the individual, he/she will take them to Mat-Su Pretrial on a Title 47 hold, unless they need medical attention and then the individual will be brought to the hospital.

Another example of a Title 47 hold typically handled by law enforcement is when an individual is making suicidal threats or having suicidal ideations and there is a need to remove them from a circumstance where they could harm themselves. In this case, law enforcement will deliver the individual to the MSRMC ED. Since the hospital does not routinely have ED security guards, the officer may stay with the respondent for a short while if they are combative and need to be restrained. If the individual is suicidal and a significant crime has been committed, the officer will instead remand the individual to Mat-Su Pretrial where he/she will be evaluated.

Law enforcement is also called for cases where a person is causing a public disturbance, such as pushing a shopping cart in a local grocer's parking lot with all their personal belongings and yelling at cars as they drive by. Unless a law is being broken or he or she is incapacitated or a threat to themselves or others, taking the individual into protective custody is not appropriate. The officer will visit the scene and leave but may be called back in a short time period for similar complaints. At times complaints from commercial properties turn into trespass issues, and law enforcement will then intervene and take the individual to Mat-Su Pretrial. Another type of call includes calls from schools when a student is being aggressive. Law enforcement will go to the school and attempt to resolve the situation.

Mat-Su Health Services Walk-in Services and Crisis Line

Another entry into the BH Crisis Response System is through Mat-Su Health Services (MSHS). This organization began as a Community Mental Health Center in 1977 and later became a Federally Qualified Health Center. MSHS publicizes its crisis line through the yellow pages, its website, 211 listing, and brochures. They maintain a 24 hour/7 day/week crisis phone line, which has an afterhours answering system that recommends that the patient call 911 if the emergency is life threatening; if the person has a mental health crisis that cannot wait for office hours, the person is told to listen to the recorded message and, after, they will be connected with a staff member. In FY2014, MSHS received 214 calls to the crisis line. Master's level clinicians who respond to the crisis phone line provide face-to-face assessments at the MSRMC ED and at Mat-Su Pretrial to determine if a person is a threat to themselves or others. In FY2014, MSHS conducted 329 emergency BH assessments. MSHS has written memorandums of agreement (MOAs) with several local BH providers, local law enforcement agencies, the Mat-Su Regional Medical Center (MSRMC), and through the Agency Emergency Response Plan, which is a mutual aid agreement with the Red Cross. MSHS has also developed strong relationships with Anchorage-based residential programs, including API, Providence, North Star Behavioral Health, and the Mat-Su Regional hospital. MSHS states that they provide same-day appointments for individuals experiencing a BH crisis. In FY2014, 23 patients were

seen for this type of appointment. MSHS literature also states that for individuals who are seen after-hours and who require clinical follow-up, a follow-up crisis appointment is offered at MSHS the next business day.

Mat-Su Regional Medical Center

Mat-Su Regional Medical Center is a 74-bed facility that offers inpatient and outpatient care, diagnostic imaging and emergency, medical and surgical services. MSRMC also has an off-site urgent care facility. The manager of MSRMC is Community Health Systems, Inc., which owns, operates, or leases 206 hospitals in 29 states with approximately 31,100 licensed beds.²

If the 911 system has been activated for an individual in need of emergency BH services, either an ambulance or law enforcement officer will bring the individual directly to MSRMC. MSRMC ED has two beds designated for BH patients. If these beds are occupied, the ambulance will be diverted to a hospital in Anchorage. However, MSRMC will not refuse care to walk-in BH patients. In 2013, there were approximately 12 times when the emergency department diverted ambulances from delivering BH patients. In 2014, from January through July, the MSRMC ED was diverted 14 times.

The care that BH patients get at the MSRMC ED is focused on ensuring that the individual is kept safe and is medically stable in order to proceed to another point in the BH crisis response system, either voluntarily or using an ex-parte order. In the MSRMC ED, a BH patient will be medically stabilized, if necessary. Staff will call the Mat-Su Health Services (MSHS) on-call BH consultant to come and do a BH assessment to determine if the patient is a threat to themselves or others. The MSHS staff person will do the assessment and recommend whether the patient should be transferred to another facility or released home and/or into the care of relatives/friends. If it is determined that the patient should be involuntarily admitted to API, the ED staff fill out the ex-parte paperwork and contact a magistrate to get the involuntary 72-hour hold. Currently, MSHS on-call staff are not called for consultation if it is clear the patient needs an involuntary commitment to the Alaska Psychiatric Institute. The patient will wait in the MSRMC ED for a bed at API to become available, which may take a few hours or several days.

If the patient's medical needs require inpatient hospital admission, he or she will be admitted to MSRMC. MSHS will do BH assessments for inpatients as needed. MSRMC has no psychiatrist on staff or on consult to the emergency department or in-patient services. There are two MSRMC social workers who are available Monday through Friday during the day to assist with discharge planning and referrals for BH patients in the ED and on the medical/surgical units. Prior to a year ago, the social workers also took calls and were available on nights and weekends. When the social workers are not available, the ED physicians are responsible for discharge planning and referrals. Common BH crises that are seen in the ED include:

² Mat-Su Health Foundation (MSHF) is the official business name of Valley Hospital Association, Inc., which shares ownership in Mat-Su Regional Medical Center. In this capacity, the MSHF board members and representatives actively participate in the governance of Mat-Su's community hospital and protect the community's interest through board oversight. The MSHF invests its assets into charitable works that improve the health and wellness of Alaskans living in Mat-Su. More information is available at www.healthymatsu.org.

- Suicidal patients these patients require one-on-one supervision while in the ED. They are put in a room under constant video surveillance.
- Intoxicated and suicidal patients these patients must become sober before they can receive a BH assessment from MSHS staff.
- Drug overdose patients these patients may be violent and/or have medical complications and will be admitted to inpatient if their condition necessitates this level of care.
- Incapacitated patients with serious mental illness these patients are in a state where they can't take care of themselves and their family and friends are not able to care for them.
- Intoxicated individuals these patients will be held until their blood alcohol level is below a
 safe limit and then they can be released to a responsible party. If a responsible party cannot
 be identified, they will stay at the ED until they are sober. Sometimes when they become
 sober they may experience acute alcohol withdrawal which is life threatening and they will
 need to be admitted to the hospital.
- Intoxicated patients who are in law enforcement custody these patients are being remanded to Mat-Su Pretrial but are so intoxicated they need to be medically cleared before they can be remanded.

BH patients seen at MSRMC are referred to a variety of places. The next step in the continuum of care for patients in a BH crisis are all in Anchorage. The services provided by these organizations are listed below.

- <u>Providence Crisis Recovery Center</u> short-term crisis services to effectively manage psychiatric symptoms in order to prevent frequent hospitalization (12 years and older).
- <u>Providence Mental Health Unit</u> short-term comprehensive crisis treatment program addressing a multiplicity of mental disorders (18 years and older).
- <u>Providence Discovery Unit</u> -acute, inpatient program for adolescents in need of intensive crisis intervention, stabilization, and BH treatment (13-18 years).
- North Star Hospital acute psychiatric hospital for children (4-17 years).

Mat-Su Pretrial

Mat-Su Pretrial is a 102-bed facility that houses individuals who are remanded for committing a crime or for a Title 47 substance abuse hold. There is medical coverage by a registered nurse (RN) for 12 hours each day, and consult is provided by mental health staff from Palmer Correctional Center for inmates with serious mental illnesses on an on-call basis during the weekdays. In the first seven months of 2014, there were an average of 18 inmates per month who required a mental health consult. A BH consultant from MSHS provides consultation on the weekends and evenings.

If an individual is admitted to Mat-Su pretrial and needs BH medications, they will see a consulting medical provider. It can take several days to one week to get an inmate the medication he or she needs. A professional from Akeela, an Anchorage-based non-profit organization with an office in Palmer, will come in to do a substance abuse assessment if needed. The assessment is put in the inmate's file and follows him/her throughout sentencing and placement.

Law enforcement brings individuals to Mat-Su Pretrial on Title 47 holds if they are incapacitated due to drugs and alcohol or unable to take care of themselves, and the officer cannot locate a third party to oversee their safety. They also bring in individuals with mental illnesses and/or individuals who are intoxicated who have committed a crime. If an individual's blood alcohol content (BAC) is 0.40

g/dL or higher, he/she is automatically taken to the MSRMC ED to be medically cleared. Once the blood alcohol level decreases to lower than 0.40 g/dL and the patient is medically cleared, he/she is discharged and an officer will bring the individual to Mat-Su Pretrial. A Title 47 hold will become an ex-parte order if that person is deemed unsafe to be released when he or she is sober.

Providence Crisis Recovery Center (PCRC)

PCRC is a sub-acute voluntary inpatient facility for individuals 12 years and older who are experiencing psychiatric symptoms that may lead to crisis and psychiatric hospitalization. Referrals come from emergency rooms, private and public BH providers, the Office of Children's Services, and the Alaska Native health system. PCRC is also used as a transitional program for individuals who are discharged from API and not ready to return home. PCRC seeks to safely stabilize an individual's symptoms and improve their coping skills in order to address their crisis (Providence Health and Services, 2014). PCRC does not provide detox services, medical management, or care for extremely suicidal, volatile, or aggressive individuals. A multidisciplinary team of professionals including physicians, nurse practitioners, registered nurses, licensed clinicians, and mental health specialists provide crisis intervention and stabilization, psychiatric nursing and medication management, group therapy, education, and referral assistance. Patients are required to bring their own 3-10 day supply of medication.

PCRC, which has 16 sub-acute beds, is often full. They accept admissions on a first-come, first-served basis and do not keep a waiting list. In order to be admitted, an individual must have a mental health issue. If an individual's only issue is a substance use disorder, he/she will not be admitted; however, the Center will accept individuals with a dual diagnosis (i.e., individuals who are suffering from both a diagnosable mental illness and substance use disorder). Staff try to coordinate follow-up for patients before discharge so they are set up with outpatient care when they leave.

Alaska Psychiatric Institute (API)

The Alaska Psychiatric Institute was opened in 1962 and is the only state-funded psychiatric hospital in Alaska. The Institute has 50 acute care beds, 10 adolescent beds, 10 neuropsychiatric beds, and 10 forensic beds. The hospital uses an acute care model and approximately ninety-seven percent of the admissions are involuntary ex-parte orders. The goal is to help patients who are in crisis by stabilizing them and moving them to a lower level of care. In 2011, the average length of stay for Mat-Su residents was 11 days; this was the shortest length of stay compared to residents from other areas of the state. At that time, Mat-Su residents made up approximately 10 percent of the overall admissions (UAA Center for Behavioral Health Research and Services, 2011). In order to explain the shorter length of stay for Mat-Su patients, a 2011 report from UAA Center for BH Research and Services theorized:

"It is possible that Mat-Su has always used and continues to use – API as its psychiatric emergency room, resulting in most if not all patients, regardless of specific needs, being admitted to API (i.e., Mat-Su patients do not [typically] pass through the Providence Psychiatric Emergency Room but go directly to API). Treatment planning for these patients may then redirect them to the most appropriate services, resulting in shorter stays. This hypothesis needs further corroboration."

In 2013, 242 Mat-Su residents received care at API. From January 1, 2011 thru March 31, 2014, there were 99 residents who had repeat visits to API. Fifty-five individuals were admitted twice, 22 were

admitted three times, 22 were admitted between 4-7 times, and 4 people were admitted 8 to 13 times. Patients must be medically cleared prior to admission. Residents from Mat-Su are typically sent from the MSRMC ED to API. Individuals seen at MSRMC ED are transferred to API by contractors who offer transportation specific to BH patients. API provides services to address serious mental illness, but does not offer substance abuse treatment. The facility will keep an individual with a substance abuse disorder for the 72-hour involuntary placement and make sure he/she is safe and also try to find an appropriate placement for the individual.

Providence Psychiatric Emergency Department (PPED)

The psychiatric emergency department at Providence Alaska Medical Center has six beds and provides assessment, crisis intervention, medical care, and referrals to individuals in psychiatric and/or substance abuse crisis. Individuals can receive crisis care in the emergency department or through the 24/7 crisis line that is housed in the PPED. The department is staffed by emergency medicine physicians, psychiatric advanced nurse practitioners, licensed clinical social workers, registered nurses, patient care technicians, and psychiatrists who all work as a multidisciplinary team. Additionally, forensic nurses provide medical forensic exams to individuals who are victims of interpersonal violence, including sexual assault. When MSRMC ED is on divert, BH patients may be taken to PPED or Alaska Regional Hospital Emergency Department. Several BH professionals and referrers in Mat-Su said they recommend the PPED to their clients who are in crisis if they have safe transportation to Anchorage. In 2013, 244 Mat-Su residents were seen in the PPED.

Mat-Su BH Crisis Response System Patterns of Care

There are a variety of ways that patients move through the BH crisis response system in Mat-Su. The following section will present six typical patterns of movement for Mat-Su residents experiencing a BH crisis.

Pattern 1: Adult with Suicide Ideation

Adults who threaten or attempt suicide are brought to MSRMC ED by law enforcement or emergency medical services. At the ED, a consultant from MSHS will assess the individual, and if the individual is deemed a threat to themselves or others, an ex-parte order will be requested for an involuntary admission to API. The patient will remain at MSRMC for several hours or days until a bed opens up at API. If the person is not deemed a threat to themselves or others, he/she will be released to home or a shelter.

ADULT WITH SUICIDAL IDEATION



Figure 2. Adult with Suicidal Ideation

Pattern 2: Adult with Suicidal Ideation when MSRMC ED is on Divert

MSRMC ED has two beds for patients with BH problems. When these beds are full, the ED alerts EMS and law enforcement that they can no longer bring BH patients to the ED (walk-ins are still accepted). Law enforcement and EMS must transport the patient to an Anchorage hospital for assessment and possible referral to API. If the patient has only BH needs, he or she will be brought to the PPED which has 6 beds. If those beds are full, the patient will be admitted to the Providence Alaska Medical Center ED. When the MSRMC ED, PPED and the regular Providence ED are full, the Mat-Su EMS or law enforcement officer will take the patient to Alaska Regional ED. Once assessed, if the patient is not deemed a threat to themselves or others, and do not need a voluntary admission to an Anchorage in-patient facility, he/she will be discharged from the Anchorage facility and must find transportation back to his or her home in Mat-Su.

ADULT WITH SUICIDAL IDEATION WITH MSRMC ED ON DIVERT



Figure 3. Adult with Suicidal Ideation when MSRMC ED is on Divert

Pattern 3: Adult with a Serious Mental Illness (SMI) – Voluntary Admission

If an adult with a serious mental illness seeking voluntary assistance is identified by law enforcement, BH providers, or the MSHS crisis line, he/she will be referred to or brought to MSRMC ED. While there, the patient will receive a BH assessment from the on-call MSHS staff and then he/she may be referred to Anchorage for inpatient hospitalization services or, if their needs are less intense, to the PCRC. If that same adult is seen by a BH or medical provider or public health nurse, he/she may be referred to MSRMC ED or they may be referred directly to the PPED. Many providers and referrers who were interviewed for this Scan stated that if an individual has transportation to Anchorage that they felt more comfortable referring individuals to the PPED because they have specialized services for individuals with an SMI.

ADULT WITH SERIOUS ILLNESS - VOLUNTARY ADMISSION

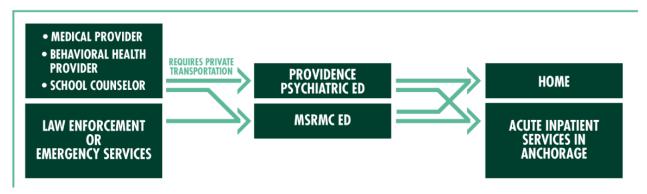


Figure 4. Adult with Serious Mental Illness – Voluntary Admission

Pattern 4: Adults with Suicidal Ideation and Heavy Intoxication

If a person is both suicidal and heavily intoxicated, he/she will be brought to MSRMC ED by law enforcement or EMS. If the person has broken a law and needs to be remanded to Mat-Su Pretrial, he/she will be seen at MSRMC ED for medical clearance before they can go to Pretrial. Once they are cleared, law enforcement will return and transport the individual to Pretrial. At Pretrial the individual may receive a mental health consult from a BH professional from Palmer Correctional Center or MSHS. If the person does not need to be remanded, he/she will be assessed by a MSHS clinician at MSRMC ED when they are sober. If he/she is still suicidal, hospital staff will request an ex-parte order and transfer the individual to API. If they are not suicidal they will be sent home.

ADULT WITH SUICIDAL IDEATION AND HEAVILY INTOXICATED



Figure 5. Adult with Suicidal Ideation and Heavily Intoxicated

Pattern 5. Person Creating a Public Disturbance

If law enforcement is called to a public disturbance involving an intoxicated individual or an individual with a mental illness, the officer will take the individual to Mat-Su Pretrial. If the person is heavily intoxicated with a Blood Alcohol Content level (BAC) above .30g/dL, the individual will be taken to MSRMC for medical clearance before going to Mat-Su Pretrial. When the person is sober and calm, MSHS on-call staff or the Palmer Correctional Center mental health consultant will assess the person to determine if he or she is a threat to themselves or others.

PERSON CREATING A PUBLIC DISTURBANCE

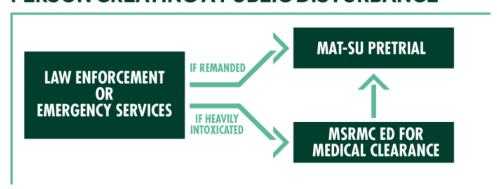


Figure 6. Person Creating a Public Disturbance

Pattern 6: Child with a Serious Emotional Disturbance (SED) or Suicidal Ideation

Similar to the two paths for a voluntary adult with SMI, there are two main paths when a child has been identified as being suicidal or experiencing a serious emotional disturbance. If the emergency crisis services or law enforcement are involved, the child and their caretaker will be brought to MSRMC ED. There they will see a mental health consultant from MSHS and will be referred to an appropriate facility in Anchorage for inpatient care. Many of the BH and medical providers and referrers who were interviewed for this Scan stated that if the caretaker has a safe way to transport the child to Anchorage, they would recommend that they go directly to the PPED for crisis services.

CHILD WITH A SERIOUS EMOTIONAL DISTURBANCE OR SUICIDAL IDEATION

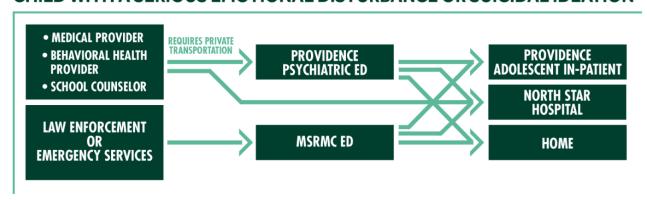


Figure 7. Child with a Serious Emotional Disturbance (SED) or Suicidal Ideation

Gap Analysis Summary

The current BH Crisis Response System for Mat-Su Residents relies heavily on the emergency medical and law enforcement response system. While an individual experiencing a BH emergency can be seen at MSHS for an outpatient appointment or talk with a counselor on the crisis line, there are no other ongoing services in Mat-Su for residents to help gain stability in a crisis situation short of using the hospital emergency room. Further, there are few services to prevent individuals who are starting to experience declining BH from spiraling down into a full blown crisis. If the person is able to go to a crisis walk-in appointment and that does not put them on stable ground, the next step is to enter the emergency medical system at MSRMC ED. While the health care system in Mat-Su has often required residents to travel at least 44 miles (from core area) to Anchorage for specialty services, this requirement for some individuals undergoing a stressful BH issue puts a difficult financial and organizational obstacle in their path to seek care. There are no formal arrangements to assist individuals in crisis to access services in Anchorage.

Table 5. A Comparison of Services Available to Mat-Su Residents and the Good and Modern Addictions and Mental Health Service System.

Good and Modern Addictions and Mental Health Services System	Services Exist in		
	Mat-Su	Anchorage	
Warm line	-	-	
Medically monitored intensive inpatient	-	-	
Peer-based crisis services	-	-	
23-hour crisis stabilization service	-	PPED	
24/7 crisis hot-line services	MSHS has a response line for after-hour crisis calls	PPED	
Urgent care/walk-in services	MSHS same-day crisis appointments	PPED	
Mobile crisis services	-	-	
Short-term crisis residential/stabilization	-	PCRC	

⁻ indicates the service does not exist

Table 5. presents a comparison of the services available in Mat-Su and Anchorage with services suggested in the Good and Modern Addictions and Mental Health Service System. Mat-Su residents do not have access to any of the services suggested by SAMHSA in this model system. There is a crisis hot-line at MSHS; however, it does not meet the American Academy of Suicidology Standard for telephone response Level I (American Association of Suicidology, 2012). Although it meets the first part of the standard - having a dedicated phone number and line that is answered by the agency's 24-hour crisis services - the line is not staffed by a "person specifically on duty for the purpose of serving the agency's callers." The MSHS staff member who answers the call also responds to the ED and has day job responsibilities at the health clinic. These other responsibilities may prohibit their ability to respond appropriately if the call volume is high on a particular day. Anchorage has several crisis response components of the Model System, such as 23-hour crisis stabilization services, urgent care/walk-in services at the Providence Psychiatric Emergency Department, and short-term crisis residential/stabilization. The path for a Mat-Su resident to access these services requires transportation, which is not available to all individuals who are in crisis. Additionally, these services are not advertised or well known in Mat-Su, and formal channels do not exist between these services and law enforcement, private providers, and the MSRMC ED.

Methodology

Interviews were conducted in 2014 with representatives from agencies who are part of the Mat-Su and Anchorage BH Treatment System. These interviews, which lasted from 1 to 2 hours, were recorded and transcribed and the content analyzed using NVIVO qualitative analysis software. Representative from the following agencies were interviewed:

Akeela Alaska Family Services (BH Services, DV/SA Programs) Alaska Family Youth Network Army OneSource Alaska Psychiatric Institute Alaska State Troopers ARCH - Volunteers of America **ASAP** Big Lake Elementary School Burchell High School **CCS Early Learning** Chickaloon Tribal Council CODI Daybreak Denali Family Services Domestic Violence Task Force Family Centered Services of AK **Housing and Homeless** Coalition Joint Base Elmendorf Richardson BH Juvenile Justice Coalition

Mat-Com Mat Su Senior Services Mat Su Youth Facility Mat Su Day School Mat-Su Office of Children's Services Mat-Su Pediatricians Mat-Su Pretrial Mat-Su Services for Children and Adults Matanuska Susitna Borough EMS Matanuska Susitna School District **Federal Programs** Matanuska Susitna School District (Pre-K Program, Counseling Department) Mat Su Health Services (BH Program, Impact Program) MSRMC (ED Physicians, Nursing, Social Work) **MSRMC Grand Rounds** North Star Boys Residential North Star Hospital Nugen's Ranch

Palmer Emergency Dispatch Palmer Police Department Presbyterian Hospitality House Providence BH Services in Mat-Su Providence Crisis Respite Center Providence Psych ED Mat-Su Public Health Nursing Playful Journeys Private BH Providers Mat-Su Senior Services Coalition Set Free Alaska Sunshine Health Clinic State of AK Department of Corrections State of AK, Department of Juvenile **Justice** Solstice Family Practice South Central Foundation (BH Services, Nutagsiivik) The Children's Place Wasilla Police Department Valley Christian Conference

Vet Center staff

Mat-Su BH providers and referrers into the BH treatment system were asked questions regarding how the system is working, gaps in the system, and recommendations for how to make improvements. The following is a synopsis of the major themes that arose during these interviews.

Crisis Response Provider Voices

All BH Crisis Response System (BHCRS) professionals felt there are gaps in the larger BH treatment system that affect Mat-Su patients, such as lack of substance abuse treatment, detox, crisis respite, and a homeless shelter in Mat-Su.

Hospital staff expressed frustration at not being able to help patients because the resources are not available in the community. One ED physician stated,

"It just hurts, and it's hard to give them only a few minutes and you know, we are not counselors. We're physicians and we care. But, we can only do so much, especially with the resources that we have. But it's hard. It's hard to say 'I can't help you.' And they look at you, like, 'finally, I want help and you can't give it to me,' and I say 'I can't.' You know, it's awful to leave and drive home after that shift."

Another ED physician stated,

"I feel like we're in this kind of, like stopgap, but then there's no - there's no output. There's lots of input, but there's no good output."

Lack of substance abuse treatment and immediate access to detox services was brought up by emergency responders and MSRMC staff. One person stated,

"So, what I would like is treatment to be available when the client is ready and has the support. Now they have to go and get an assessment. There is not an immediate option. They might be waiting weeks or months. By the time their treatment is ready for them, they're using again."

Not having a place to send a patient to safely detox was another gap that was noted by all BHCRS staff, especially in the emergency department. MSRMC ED staff said that not having a detox facility to send patients puts them in a difficult position, especially if they are concerned that a person will experience acute withdrawal from alcohol, which can be life threatening. The ED physicians said that if the patient has supportive family members, they may order outpatient medication for them until they can get into a detox facility. The situation is compounded, they said, because there are no residential detox services available in south central Alaska.

Waiting for open beds at API was mentioned by emergency responders and MSRMC staff as a problem. An ED staff member stated,

"We have API consistently full, to where we have to board patients in the emergency department for days at a time sometimes before they can go to API."

Mat-Su and Anchorage BH professionals said the following was working well with the current system:

- MSRMC ED providing medical clearance for clients of Mat-Su pediatric residential providers
- Coordination of care at discharge between Providence acute care services and MSHS outpatient care
- The provision of both medical and behavioral health care at MSHS
- Being able to place children in Mat-Su therapeutic foster homes after discharge from Anchorage acute care services
- Using Providence Psych ED as an entry point for Mat-Su residents who can get to Anchorage

Mat-Su Pretrial staff and MSRMC ED staff all felt their options were limited as far as only being able to send patients to API or home. Emergency responders also stated that there needs to be services like crisis respite or peer support services that would provide an "in-between" place to take people who were not involved enough for API, but not stable enough to be in a home environment. A place that would do evaluation, stabilization, and treatment for 72-hours to several days. One ED physician stated,

"If they don't go to API, frankly I'm uncomfortable. I mean because I just don't know-a lot of these people talk about [having to wait] six weeks [for an appointment] until they can see someone who can get them on meds. If they came to the ED because they are that worried and I 'm not sending them to API, I'm just not sure what happens when they leave."

A MSRMC social worker and others said that for some patients who are homeless there is little for them in Mat-Su.

"A shelter for the homeless, that's something that we also don't have out here. I mean, we have the shelter for domestic violence and we have the Family Promise -for the families who move around the churches, but we don't have a homeless shelter for other adults who are homeless. And so we send them to Anchorage."

There was a general sense that things have gotten worse as far as the lack of resources in the community. Staff cited the disappearance of needed services such as detox at Nugen's Ranch and the Clitheroe Center in Anchorage, as well as losing a crisis respite facility in Mat-Su, called Colony House, that accepted people for brief stays for crisis stabilization and served as a step-down unit for individuals discharged from API. Additionally, it was mentioned that the hospital used to have psychiatrists on consult.

BH professionals and crisis responders who were interviewed said the following services are needed for Mat-Su residents:

- Youth and adult detox services
- In-patient substance abuse treatment
- An emergency homeless shelter in Mat-Su
- Crisis respite care in Mat-Su
- Preventive community services to intervene before crisis in Mat-Su
- 24/7 BH staff at MSRMC ED
- Residential placements, such as assisted living facilities and a nursing home for people with BH issues including seniors
- Transportation within Mat-Su and to/from Anchorage

BHCRS professionals stated there are obstacles that many patients face that affect their ability to get care - lack of transportation, financial resources, supportive and helpful families, and social support.

Transportation

Social work staff stated that the bus system works fairly well for an organized person such as a commuter, but to use it to attend a weekly appointment if you live outside the core area and the bus stop is miles away from your house - that can present an unsurmountable difficulty. Even if they have a car, the social worker stated, they may not have money for gas for the vehicle to attend a weekly appointment.

Families with Significant Challenges

MSRMC staff stated that sometimes the families of BH patients are overloaded and some family members also have mental illness. These family members may not be helpful when an individual is dealing with a BH crisis. One physician stated,

"You have family members that can be disruptive or they don't show up for two days and they dropped them off and you can't get a hold of them."

Financial Issues

Another MSRMC staff member noted that financial issues can affect if a patient follows up with an outpatient provider when they leave the ED. She said,

"So you [the patient] have an appointment next week on Tuesday at 10:00. And if your life is really chaotic, a lot can happen between now and Tuesday to derail that. And when I do follow-up calls with people and I say "Hey, how did that go? Did you make your appointment?" And they reply, "Oh no, I didn't, Wow! I can't even tell you. Like our utilities got turned off and I'm getting evicted."

Lack of Family Support

MSRMC staff stated that sometimes the patient's family has given up on them and they are just dropped off at the emergency department. One staff member told about a community member who lost his business and began abusing alcohol and his family refused to take care of him when he got kicked out of a local hotel for his drunken behavior. They dropped him off at the ED with two suitcases and said 'here you go, he's your problem now' and they walked out the door.

Lack of Social Support

The MSRMC social worker stated,

"When I ask somebody - 'who can I call for you?' And there are people who will give dozens of people. And there are other people who, seriously, cannot think of one person that they would call. A lot happens to get to the point where you really have nobody that you would call in a crisis."

Most Mat-Su BHCRS professionals felt they were not the best option of care for BH patients with severe problems.

A law enforcement officer described how he feels when he is holding a person in a BH-related crisis and he is trying to transport them to an appropriate place when the MSRMC ED is on diversion (not accepting BH patients due to space).

"That gets a little scary for a couple of reasons. One is you've got this person, he's in your custody, and the longer you have him the more worried you are. I need to do something with this person and get them somewhere safe. Two, you have an officer tied up for the better part of an eight-hour shift, so there are other things going on that aren't getting done. And three, we're kind of catch-all health professionals. Right? We are not really trained to be mental health workers. We like to help, but we are not best suited to do it."

Mat-Su Pretrial staff stated that they were uncomfortable overseeing highly intoxicated or mentally ill inmates when there is no medical support at night. Emergency Department physicians stated that BH is one of the areas that they are trained in the least and other specially trained staff would be optimal for caring for the BH patients. One physician stated,

"This takes a huge amount of our time. It's one of the areas we're probably least trained in. These are really high-risk patients and they have a big ripple effect on the community. It's a perfect storm in so many ways."

BHCRS staff said some BH patients required staffing and space resources that does not exist in the current system in Mat-Su.

Staffing

A law enforcement representative described the time it takes to handle a person in a BH crisis stating,

"There are certain things you can drop in the middle of something and go on to something else, you know, like a traffic stop. If there's something that is a person crime that's coming up, you can break and go do something else. Once you have custody of an [BH] individual, you're tied to them until they are gone. The best thing you can hope for is to remand them to Pretrial on a Title 47 hold real quick and then try to get a move on to something else if you have to."

It is required in the MSRMC ED that high risk patients have one-on-one monitoring and at times the nursing staff are stretched thin when they need to devote a staff member to observation for an entire shift. One staff member stated,

"One-on-one observation for high-risk patients is difficult. Finding staff. Like our patient currently in room 2 is a flight risk. She is delusional and she's manic, bipolar, and paranoid, and she doesn't want to be here. She's on a 72-hour hold and she's been here, like, five days. Waiting for API because API doesn't have any beds. So now she goes back and forth to the bathroom constantly and she'll try to sneak off. There's two doors in the bathroom. She'll sneak out the other door. You know, frequently those doors open over here with traffic in and out - our ambulance bays. So if the person watching her isn't on top of watching this, is distracted by somebody else on a question or you know, something goes on in the other room - I mean, it is a risk."

A MSHS staff member said that it is difficult for them to staff 24/7 crisis response services in the current labor market where finding and keeping BH professionals is difficult. He stated,

"I have to keep my clinical staffing at a certain level so I can keep basically eight clinicians who cover seven days of the week. If they work at night they have to come in the next day and go to work. It is hard to maintain that. [Staff] burnout is a problem. I worry about my staff. [Staff think] 'Do I want to go to work for Denali Family Services and work 9-5, or do I want to work at MSHS and have to do call?'"

Space

Mat-Su pretrial staff stated they cannot house inmates with serious mental illnesses or inmates who are intoxicated with other inmates - they must be housed in one of three segregation cells. They said these cells are frequently filled to capacity by inmates with BH issues.

MSRMC ED has two beds for BH patients. When these beds are filled they notify emergency responders to deliver BH patients to Anchorage hospitals instead of MSRMC. Emergency responders have stated that having to divert an ambulance or squad car to Anchorage restricts their ability to use these resources to respond to other emergency situations in the borough.

The MSRMC ED staff felt the ED was not the appropriate place for some BH patients.

MSRMC staff stated that there are BH patients who are not appropriate for the environment within the ED. Emergency responders noted they have no other options than to bring these patients to MSRMC. EMS responders stated that when they respond to a drug overdose or someone who is severely intoxicated in the field they always wait for law enforcement back-up to help ensure their safety; however, hospital staff report that they do not routinely have security guards in the ED. ED staff reported that violent intoxicated patients have destroyed the psych rooms three times. One staff member reported,

"One threw a chair through a window, ate the glass, and wound up in the operating room. Another threw a chair out and then destroyed part of the nursing section."

Staff stated that an aggressive or violent patient can affect the entire ED.

"It's disruptive if you've got a little four-year-old who has a chin lesion who is crying because the guy's cussing in the next room, or there's a patient with dementia waiting for an inpatient bed and they don't understand what is going on. They're frightened because of the yelling and cursing. So we're moving patients to other beds. It really affects everybody - every nurse in the department and many of the patients."

It was also pointed out that the ED environment was not always appropriate for the patient's experience. One staff member stated,

"So you can imagine a patient with psychosis in the emergency department, which is a chaotic environment. I mean just spend five or six hours there in a room with a guard, waiting, waiting, and waiting. And think of what they've seen in an ER with their door open, in 24-48 hours. What have they seen? They've seen traumas come in, they've seen heart people come in, they may have seen people - I mean, not directly die, but you know, come in, going out one way or another. That's a nightmare."

ED physicians mentioned that the Providence Psych ED is much better equipped to handle BH patients but once a patient is at MSRMC, because of the Emergency Medical Treatment & Labor Act, they cannot be transferred to another ED.³

MSRMC staff and others felt there are resources they need within the ED to be more effective. These included safety measures, 24/7 social work coverage, and a consulting psychiatrist.

³ Medicare participating hospitals must comply with the federal Emergency Medical Treatment and Labor Act (EMTALA). EMTALA requires hospitals with emergency departments (ED) to provide a screening examination to any individuals who comes to the emergency department and requests such an examination. EMTALA also prohibits hospitals with emergency departments from refusing to examine and treat individuals with an emergency medical condition, including psychiatric and substance use conditions.

Safety Measures

Within the Emergency Department, staff said that they do not feel safe when dealing with some BH patients. Violent BH patients have caused damage and injured staff. ED physicians requested a metal detector to check for guns and a security guard for the emergency room.

24/7 Social Work Coverage

ED physicians said they need help on nights and weekends with discharge planning and referrals. Currently there is social work coverage only during the weekdays. One doctor said, "Social workers are like gold." It was noted that having social workers follow up the next day with patients who were in at night is not always effective. Staff stated,

"It is different to [have social work] follow up the following day with somebody, to call them and say 'I understand you were in the ER last night for........' And when they talk with them it is a different qualitative experience than going and sitting down with them and talking when they are in the ED. So they're only getting kind of to the surface. And we know we're going to end up seeing them back; that's how it works."

Psychiatrist on Consult

Emergency Department staff along with law enforcement and other providers in the community stated that a consulting psychiatrist is needed. Currently, MSHS master's level BH staff provide the only consult which is focused on whether the patient needs an involuntary commitment. One staff member stated that some community medical providers were reluctant to admit a child with a potential overdose because they did not have confidence in the current BH consult system. One ED physician expressed frustration at having to start a BH patient on meds or adjust their meds without a consult with someone who does this on a regular basis. A local pediatrician said they wanted more than just an assessment about whether the patient was a threat to themselves or others, but rather a psychiatric consult that would help them with appropriate discharge planning.

Communication and coordination between agencies within the current system could be improved.

MSRMC ED staff and Anchorage providers stated that it is often difficult for them to find out what provider the BH patient is seeing in the community in order to get more information or coordinate follow-up care. Often times, the patient will only remember the first name of their BH provider.

There were mixed statements from MSRMC staff regarding coordinating care with MSHS. Some staff said that the on-call person takes a long time to respond to calls from the ED. Other MSRMC staff said that their relationship with MSHS was working well and that some patients who were seen at the hospital make a smooth transition into outpatient care at MSHS.

ED physicians stated that it is often difficult for them to know what services are out in the community for patient referrals when the services are always changing. ED staff also stated they don't always know what happens when patients leave and go to another facility, such as what type of assessment or monitoring happens when they send a heavily intoxicated person to Mat-Su Pretrial.

The ED staff expressed frustration about trying to set up care for patients when they leave the ED saying it is not always easy to make a referral for a patient. Physicians stated that some of the organizations that provide outpatient services place barriers that make it more difficult for a patient to get services. For example, one outpatient facility requires that the patient be discharged from the ED, and the patient must make the call to schedule the appointment on their own rather than be assisted by ED staff. Another staff member mentioned a residential treatment facility that requires potential patients to call every day to see if a slot opens up for them. They said that this level of organization may be difficult for some BH patients.

There were also mixed views about connecting with Anchorage services. One provider said she had been discouraged by PPED staff from sending her patients directly to their ED, while other Mat-Su providers said they didn't receive that message. MSRMC staff said it was difficult to get patients into the Providence inpatient psych unit. The staff said that to have a patient admitted to the inpatient unit they had to have MSHS do a BH assessment and the Providence clinician had to interview the MSHS clinician to see if the patient is acceptable. API staff related that they are not staffed for nighttime admissions sent from the MSRMC ED.

Obstacles Mat-Su residents face when getting in-patient care in Anchorage: Iack of contact with family members Iack of transportation Iack of supportive housing on discharge

An Anchorage acute care provider stated that sometimes when Mat-Su residents are receiving inpatient services in Anchorage, it is difficult to coordinate care with family members. She stated,

"When you have family members who are struggling with mental health or substance abuse issues themselves, it's really tough to deal with that, especially if they're not located here. Sometimes it is hard to get in touch with the family and hard to get a release of information to make connections with other agencies for discharge. It holds up everything."

Acute care providers in Anchorage said they discharge Mat-Su residents who have no way to get back to the Valley. The providers will use bus tokens and taxi fare to put together a way to transport patients to their homes. Additionally, they said that lack of transportation and lack of financial resources affect the patient's ability to get medication upon discharge. Acute care in-patient providers in Anchorage stated they often need to discharge Mat-Su patients to a step-down facility before they can go home. API staff said,

"There are no assisted living facilities (ALFs) in the Valley, especially who provide specialized services for BH. So our discharge planners have a heck of a time trying to find places for people to go in Mat-Su. They usually end up in an ALF in Anchorage or somewhere else."

Mat-Su Behavioral Health Professionals and Referrers

Mat-Su BH providers and referrers see the crisis response system as broken. If private transportation is available, then providers and referrers send their clients to Anchorage to the Providence Psych ED or North Star Hospital.

The following statements from Mat-Su providers explain this finding:

"I don't want to speak poorly of the current system in the Valley, but I rarely send anyone to Mat-Su Regional Hospital. The ER is not really set up to do psych evals for crisis. They have fantastic physicians, but not physicians who specialize in BH."

"There's other physical things going on [in the emergency department], so a child ends up having a long wait. Eventually they're going to call Mat-Su Health to have someone do an assessment. That all takes a whole lot of time, especially if it is a child - if a child is really in that clear of a crisis, sometimes time is not your friend. And so the better option is calling directly to those places [Anchorage acute care providers] and if they qualify, bring them in. It is just cutting through what is eventually going to happen anyway."

Lack of transportation is a pressing need for individuals accessing crisis services both in Mat-Su and Anchorage.

Providers stated that finding private transportation is often an issue both within Mat-Su and to Anchorage. A representative from the domestic violence shelter stated that they use the MSRMC ED for medical clearance, but an issue they face is finding transportation for the client to and from the hospital. This is also the case when emergency responders are involved. One rural provider said that one of the barriers to taking youth right into Anchorage to North Star Hospital or API is that law enforcement or EMS providers don't want to be taken off the road to provide transport to Anchorage.

Mat-Su residential providers appreciate having a place to bring adults and children for medical clearance.

MSRMC is used as a place for medical clearance for agencies like Mat-Su Pretrial, Mat-Su Youth Facility, the local domestic violence shelter, and therapeutic foster homes. These providers appreciate being able to bring adults and children to the MSRMC ED in order to make sure there are no serious medical issues that should be addressed before admitting them. One representative said,

"You get expert medical advice. And it can be very reassuring to the kid, that kid's parent, and to the staff that now have to receive the kid back on the unit in a few hours."

Several Mat-Su providers and referrers said they had sent someone to the MSRMC ED or had a patient as an inpatient and they were surprised that they were released instead of being transferred for more intensive psychiatric treatment.

Several BH and medical providers said they had clients who attempted suicide or were intoxicated and they were cared for at MSRMC and were discharged to home. The providers thought the patients needed to be transferred to psychiatric acute care services instead of home.

Mat-Su BH and medical providers recognized the current BH system results in some severely involved patients repeatedly cycling through the system.

One rural medical provider stated he has seen the same pattern with several patients with longstanding BH issues who choose to go off their medication and their family can't handle them. The only option is to call the state troopers. When the troopers come they can't do anything if the person is not a threat to themselves or others or hasn't broken a law. Even if they are taken by the troopers and they wind up at Mat-Su Pretrial and put on medication, they will get out and eventually be back to a crisis situation when they stop taking their meds again. Another scenario he related was that sometimes families call the troopers because a family member is suicidal, but when the troopers arrive, often times quite a bit later, the person says he/she is not suicidal. He said there are no services to help these families and patients in the Chickaloon/Sutton area. Mat-Su pretrial staff reported they often see the same people with BH issues coming in over and over either on Title 47 holds because they are intoxicated or being remanded for actions that occurred after they stopped taking their medication.

When asked what percentage of patients who frequent the ED have BH issues, the MSRMC ED physicians stated, "All." They mentioned that many high utilizers have borderline personality disorders or chronic pain issues. One physician stated,

"We see a huge percentage of people who have chronic pain issues. And I would venture to say that a hundred percent of those people have underlying psychiatric issues, which are being medicated with narcotics, and either are not diagnosed or underdiagnosed and not treated."

Methodology

The Mat-Su Health Foundation contracted with the Western State Institute of Higher Education (WICHE) to carry out the Policy Analysis for this report. This analysis examined written documents that define or direct BH crisis response services in Alaska and in Mat Su. These documents include state and federal statutes and rules and various documents authored by State of Alaska agencies. These policies, regulations and statutes are grouped in the following categories:

- access to and eligibility for services
- system and services
- funding and reimbursement
- provider and facility licensure/certification
- information management and data reporting
- quality assurance; and, client consent and confidentiality

Additionally, in order to understand the interpretation and use of these policies, key informant interviews were conducted with representatives from the following agencies:

- Alaska Family Services
- Alaska Primary Care Association
- Daybreak Mental Health Services, Inc.
- Mat-Su Health Services
- State of Alaska Department of Education and Early Development
- State of Alaska Division of BH (DBH)
- State of Alaska DBH Prevention and Early Intervention Services
- State of Alaska Division of Public Health
- State of Alaska Division of Seniors and Disabilities Services
- State of Alaska Mental Health Trust Authority
- State of Alaska Office of Children's Services

This section of the report includes a summary and analysis of state and national policies, regulations, and statutes that affect the delivery of BH crisis response services in the Mat Su Borough and in Alaska. If applicable, analysis is provided about how a policy, regulation, or statute constrains the system from working efficiently and effectively or how a policy facilitates the effective and efficient delivery of crisis services.

Access to and Eligibility for Services

Table 6. examines policies, regulations, and statutes related to *access to* and *eligibility for* BH crisis system services. In general, all individuals, irrespective of financial status, are eligible for these services. Access to crisis services greatly depends on the capacity and resources of the local and state BH system. To the extent service capacity is limited or nonexistent, hospital EDs often become a "de facto" provider of last resort. As a result, federal law around the obligations of hospitals with emergency departments to serve individuals experiencing a BH crisis are relevant to this study.

Table 6. Access to and Eligibility for Services - Policies, Regulations and Statutes

Federal Emergency Medical Treatment and Labor Act (EMTALA)

Source: Emergency Medical Treatment and Labor Act (EMTALA); Section §1867 of the Social Security Act and 42 CFR §489.24 and 42 CFR 489.20(I), (m), (q), and (r).

Policy Summary. Medicare participating hospitals must comply with the federal Emergency Medical Treatment and Labor Act (EMTALA). EMTALA requires hospitals with EDs to provide a screening examination to any individual who comes to the ED and requests such an examination. EMTALA also prohibits hospitals with emergency departments from refusing to examine or treat individuals with an emergency medical condition (EMC), including psychiatric and substance use conditions. EMTALA applies to all individuals (not just Medicare beneficiaries) who attempt to gain access to a hospital for emergency care.

If the patient has an EMC, the hospital must:

- treat the patient "within the medical facility's capabilities" to stabilize the patient's identified EMC, or
- if the patient cannot be stabilized at the hospital, appropriately transfer the patient.

Hospitals are not permitted to discharge individuals who have not been stabilized. Stabilization is obtained "when no material deterioration of the condition is likely, within reasonable medical probability, to result from or occur during the transfer of the individual from a facility." Essentially, if the patient is safe to be discharged home without the expectation of short-term deterioration, he or she is stabilized. For a psychiatric condition, stabilized means the patient is protected and prevented from injuring him/herself or others.

Under EMTALA, hospitals are required to provide an appropriate transfer of an unstable individual to another medical facility if:

- the individual (or person acting on his or her behalf) after being informed of the risks and the hospital's obligations requests a transfer;
- a physician has signed a certification that the benefits of the transfer of the patient to another facility outweigh the risks; or
- a qualified medical person (as determined by the hospital in its by-laws or rules and regulations) has signed a
 certification after a physician, in consultation with that qualified medical person, has made the determination
 that the benefits of the transfer outweigh the risks and the physician countersigns in a timely manner the
 certification. (This last criterion applies if the responsible physician is not physically present in the ED at the
 time the individual is transferred)

Transferring hospitals must:

- provide treatment to minimize the risks of transfer;
- send all pertinent records to the receiving hospital;
- obtain the consent of the receiving hospital to accept the transfer; and
- ensure that the transfer of an unstabilized individual is effected through qualified personnel and transportation equipment, including the use of medically appropriate life support measures.

Emergency Detention and Civil Commitment – Mental Illness

Sources: Alaska Statute (AS) 47.30.705, AS 47.31.100

Policy Summary: Emergency Detention for Evaluation. Alaska statute allows a peace officer, a psychiatrist or licensed physician, or a licensed clinical psychologist to cause a person to be taken into custody and delivered to the nearest evaluation facility if there is probable cause to believe the person is "gravely disabled or is suffering from mental illness and is likely to cause serious harm to self or others of such immediate nature that considerations of safety do not allow initiation of involuntary commitment procedures..." Alaska statue defines an "evaluation facility" as a health care facility that has been designated by the Alaska Department of Human Services to perform evaluations, including hospitals licensed by the State or operated by the federal government. A person taken into custody for emergency evaluation may not be placed in a jail or other correctional facility except for protective custody purposes and only while awaiting transportation to a treatment facility. However, emergency

protective custody under this section may not include placement of a minor in a jail or secure facility.

When the peace officer delivers the person to the evaluation facility, the peace officer fills out a request that the person be evaluated by a mental health professional. The person is admitted to the facility and held while an evaluation is conducted. The evaluation must take place within 24 hours after the person's arrival. If the mental health professional who performs the emergency evaluation has reason to believe the individual is gravely disabled or presents a likelihood of serious harm to self or others, and is in need of care or treatment, the mental health professional may hospitalize the individual, or arrange for hospitalization, on an emergency basis.

When an evaluation facility (as defined in statute) receives a proper order for evaluation, it shall accept the order and the individual for an evaluation period not to exceed 72 hours. The facility shall promptly notify the court of the date and time of the individual's arrival. The court shall set a date, time, and place for a 30-day commitment hearing, to be held if needed within 72 hours after the individual's arrival, and the court shall notify the facility, the individual's attorney, and the prosecuting attorney of the hearing arrangements. Evaluation personnel, when used, shall similarly notify the court of the date and time when they first met with the respondent.

If at any time in the course of the 72-hour period the mental health professionals conducting the evaluation determine that the individual does not meet the standards for commitment specified in statute, the individual shall be discharged from the facility or the place of evaluation by evaluation personnel, and the petitioner and court shall be notified by the facility.

Policy Summary: Involuntary and Voluntary Civil Commitment. A civil commitment is a procedure by which a person with mentally illness is placed in a hospital or other type of health care center for treatment of his or her mental illness. There are two types of civil commitments: voluntary and involuntary. An individual may be voluntarily admitted to a treatment facility by signing papers agreeing to be admitted. A person admitted voluntarily can request to be released at any time. The person must be released or involuntary proceedings must be started within 48 hours after receipt of the patient's request.

If the person was taken to a treatment facility by a peace officer, the first court hearing must be held within 72 hours (excluding weekends and holidays) of when the individual arrived at a treatment center for evaluation. If the superior court judge finds that the person should be involuntarily committed, a 30-day commitment order is made. At the end of 30 days, if the person's condition has not improved, another hearing is held and the person may be committed for up to 90 days more. Likewise, at the end of 90 days, another hearing may be held and a commitment order of up to 180 more days may be made. After that, hearings are held and orders are made every 180 days. The patient has the right to a jury trial concerning any extended commitment petition. A voluntary commitment can last as long as the person continues to want treatment for mental illness and continues to consent to a voluntary commitment.

Alaska statute allows involuntary outpatient care for committed persons. An individual may be released before the expiration of the commitment period if a provider of outpatient care accepts the individual for specified outpatient treatment for a period of time not to exceed the duration of the commitment. If the provider of outpatient care determines that the individual will require continued outpatient care after the expiration of the commitment period, the provider may initiate further commitment proceedings.

Analysis: Emergency Detention for Evaluation. The Treatment Advocacy Center (TAC) identifies two major features as relevant to the quality of a state's emergency hospitalization provisions (Treatment Advocacy Center, 2014). TAC recommends that any person reasonably suspected of meeting inpatient civil commitment criteria should be eligible to be detained for an evaluation. In addition, TAC recommends that private individuals should be empowered to petition for evaluation. Alaska's commitment statute meets both of these recommended criteria.

Emergency Detention and Civil Commitment – Substance Use Disorder

Sources: AS 47.37.180, AS 47.37.170(b)

Policy Summary: Emergency Detention. An intoxicated person who (1) has threatened, attempted to inflict, or inflicted physical harm on another or is likely to inflict physical harm on another unless committed, or (2) is incapacitated by alcohol or drugs, may be committed to an approved public treatment facility for emergency treatment. A person who appears to be incapacitated by alcohol or drugs in a public place shall be taken into protective custody by a peace officer or a member of the emergency service patrol and immediately brought to an approved public treatment facility, an approved private treatment facility, or another appropriate health facility or service for emergency medical treatment. If no treatment facility or emergency medical service is available, a person who appears to be incapacitated by alcohol or drugs in a public place shall be taken to a state or municipal detention facility in the area if that appears necessary for the protection of the person's health or safety. However, emergency protective custody under this subsection may not include placement of a minor in a jail or secure facility.

DBH Psychiatric Emergency Services (PES) – Access and Eligibility

Source: Department of Health and Social Services, Division of BH Treatment & Recovery Section, Request for Grant Proposals – Comprehensive BH treatment and Recovery for FY 2014 thru FY 2016, Attachment I, March 2013.

Policy Summary: DBH provides grants to providers for "Psychiatric Emergency Services" (PES) as part of its Comprehensive BH Treatment and Recovery (CBHTR) Grants program. The DBH grant requirements state that grantees "shall serve all people in the grantee's service area who are in need of emergency BH services, regardless of ability to pay." The grant requirements have specific standards and criteria for accessing emergency services: Standard: Community BH Center's (CBHC's) shall inform service area residents of the availability and manner in which local/regional emergency services can be accessed.

- Criteria 1a: Publicize Availability of PES. The grantee shall take measures to inform the residents/agencies in the grantee's service area how the public can access psychiatric emergency services (e.g., employing public service announcements, phone directory listings, public presentations, brochures).
- Criteria 1b. Services Available to All Service Area Residents. Psychiatric emergency services are rendered to any resident of the grantee's service area, regardless of ability to pay and whether the resident is presently an enrolled CBHC client or a beneficiary, or a non-beneficiary or a person unknown to the CBHC and its clinicians.

With regard DBH eligibility and access grant criteria, the grant narrative provided by Mat-Su Health Services (MSHS) to DBH states that MSHS will:

- "focus on access by publicizing its PES program through the yellow pages, its website, 211 listing, brochures, and through its other advertising and marketing activities making sure that services are available to all residents."
- "...continue to serve, all people in the Mat-Su area who are in need of emergency BH services, regardless of ability to pay, status as a MSHS client, new, or well known. Simply due to the concentration of population, the majority of those served will come from the greater Wasilla/Palmer areas, which encompass the communities of Wasilla, Palmer, Big Lake, Houston, and the areas of Meadow Lakes, Point-MacKenzie, and Knik-Fairview."

Transportation in BH Emergencies

Sources: Department of Health and Social Services, Division of BH Treatment & Recovery Section, Request for Grant Proposals – Comprehensive BH treatment and Recovery for FY 2014 thru FY 2016, Attachment I, March 2013; AS 18.08; 7ACC Chapter 26.

Policy Summary: PES Grant. The PES grant requirements state that the grantee "arranges for secure transportation of the persons in crisis to evaluation or treatment services at a Designated Evaluation and Stabilization (DES) or a Designated Evaluation and Treatment (DET) Hospital, or Alaska Psychiatric Hospital (API)."

Policy Summary: Role of Emergency Medical Services. Both the Alaska statute and regulations are silent on emergency transportation of individuals who may be gravely disabled or likely to cause serious harm to self or others. With regard to emergency transportation for individuals who appear to be incapacitated by alcohol or drugs in a public place, as noted earlier, the statute directs peace officers and emergency services staff to take the individual to one of the facilities identified in statute.

System and Services - Policies and Statutes

This section of the report examines policies, regulations, and statutes that affect the provision of BH crisis response services, both in the Mat-Su and throughout Alaska. In general, responsibility for the provision of the public BH services rests with the Alaska Department of Health and Social Services and, through its responsibilities to manage the Mental Health Trust, the Alaska Mental Health Trust Authority. Services provided in Mat-Su, and elsewhere in Alaska, are either provided by state-operated programs and facilities (for example, the Alaska Psychiatric Institute) or by providers under contract to the Department, including DBH.

Historically, individuals who experienced acute psychiatric or substance abuse symptoms, such as an acute disturbance in thought, mood, behavior, or social relations that required immediate attention, would be treated in a general hospital emergency department or admitted to a hospital. Subsequently, they would receive less intensive outpatient treatment. It has become increasingly apparent that this service mix is frequently inadequate and expensive. Emergency rooms often lack staff with specialized psychiatric training, as well as the time and infrastructure to appropriately address the needs of individuals experiencing psychiatric or substance abuse crises. Furthermore, an emphasis on delivering the most appropriate care in the most appropriate setting has led to greater care provided in the community, lessening the reliance on admitting individuals to hospitals.

The primary goals of these services are to stabilize and improve psychological symptoms of distress and to engage individuals in the most appropriate course of treatment. In contrast to the traditional hospital inpatient-based care settings available to individuals in need of immediate attention for psychiatric or substance abuse symptoms, crisis services include an array of services that are designed to reach individuals in their communities through telephone "hotlines" or "warm lines," and mobile outreach, and to provide alternatives to costly hospitalizations - such as short-term crisis stabilization units and 23-hour observation beds. Like emergency medical services, crisis services are intended to be available to the entire community. Those receiving services may include individuals with a history of serious and persistent mental illness or a substance use disorder (SUD), or those who have never before used BH services. They may be children, adults, or the elderly.

Table 7. System and Services - Policies, Regulations and Statutes

System and Services - Policies, Regulations and Statutes

Sources: AS 47.30.523(a)(1) and (2); AS.47.30.056(a)(1)

Policy Summary: Alaska's State Mental Health Services Act provides policy direction for mental health services. The Act states "It is the policy of the state that:

- (1) the community mental health program provide a comprehensive and integrated system of community-based facilities, supports, and mental health services, including child and adolescent screening and diagnosis, inpatient, outpatient, prevention, consultation, and education services;" and,
- (2) "persons most in need of community mental health services receive appropriate services..." as provided in the statutes related to use of funds in the Mental Health Trust.

The Trust statutes specify that the funds in the Trust be used for "an integrated comprehensive mental health program..." Elements of the program, as delineated in statute, include the following crisis services:

- emergency services on a 24-hour basis
- screening examination and evaluation services required to complete the involuntary commitment process
- inpatient care
- crisis stabilization services, which may include active community outreach, in-hospital contact mobile crisis teams of mental health professionals
- crisis beds to provide a short term residential program for persons experiencing an acute episode of mental illness that requires temporary removal from a home environment
- residential services, which may include crisis or respite care

Sources: DBH's RFP for Comprehensive BH Treatment and Recovery (CBHTR) Grants FY 2014 - 2016;

- DBH's BH Services Integrated Regulations, and
- The Alaska Medicaid Provider Manual.

Policy Summary: PES Grants. DBH provides grants to providers for "Psychiatric Emergency Services" (PES) as part of its Comprehensive BH Treatment and Recovery (CBHTR) Grants program. The DBH PES grantees are required to meet core requirements related to the provision of psychiatric emergency services, as listed below:

- 1. Access (discussed earlier).
 - 1a: Publicize Availability of PES. 1b. Services Available to All Service Area Residents.
- 2. Availability
 - 2a: Availability of Masters-trained PES Staff. 2b: Availability of a Range of PES Services.
 - 2c: Availability of 24/7 Crisis Line Services.
- 3. Response
 - 3a: Local Response Services.
 - 3b. Emergency Appointment/Contact Response Time. Within two (2) hours of contact by the crisis line responder. 3c: Knowledge of Commitment Procedures. Whenever necessary, a grantee's clinician petitions for involuntary commitment orders and arranges for secure transportation of the persons in crisis to evaluation or treatment services at a Designated Evaluation and Stabilization (DES) or a Designated Evaluation and Treatment (DET) Hospitals, or Alaska Psychiatric Hospital (API).
 - 3d. CBHC Follow-Up Services for Persons Not-Hospitalized. Local BH crisis follow-up services shall be provided by appropriate CBHC staff (not limited to PES staff) to ensure that the behavioral or psychological concerns associated with the individuals' acute distress, impairment, or risk phase, have been sufficiently resolved that the individual no longer present as a danger to themselves or others or is gravely disabled. This follow-up is intended to ensure stabilization and safety.
- 4. Post-Hospitalization Follow-Up.

DBH will require API and DES and DET hospitals to schedule a post-hospitalization after-care referral with a CBHC (or private practitioner) within a week of the patient's planned discharge date. Prior to a patient's discharge, an API social worker – or a social worker at the DES or DET hospital where a patient is hospitalized – will schedule a

follow-up appointment for the patient with the CBHC nearest to the patient's residence or discharge placement. The appointment will occur no later than five (5) calendar days of the patient's planned date of discharge.

4a. CBHC's Role in Scheduling a Follow-up Appointment. A CBHC shall accommodate all requests for post-hospitalization follow-up appointments from API, North Star, other hospitals, including DES or DET hospital social workers. The CBHC will ensure that such appointments are scheduled at its clinic within five (5) calendar days of the patient's date of discharge, and will, if possible, provide the hospital social worker with the name of the clinician with whom the discharged patient's intake or counseling session is scheduled.

4b. Documentation of the Follow-up Appointment.

5. Face-to-Face Contact Required.

5a. Face-to-Face Contact Required. Except as noted in Criterion 5b, every emergency contact with an individual experiencing a psychiatric crisis requires a face-to-face intervention, including screening and assessment services; however, a tele BH consult may be employed when available and as appropriate.

5b. Service Location. These crisis intervention services are provided in any location that provides reasonable safety for the individual in crisis and the grantee's (on-call) clinician (e.g., a CBHC clinic office, a school, the local jail, a hospital emergency room). If the BH clinician is more than 50 miles away from the resident in crisis, or if unusual weather or road conditions preclude the clinician's travel, then telephonic consultative services are provided by the clinician individually or in collaboration with an emergency responder closer to the resident in crisis.

- 6. The Grantee has a Written Disaster Response Plan.
- 7. The Grantee has a MOA with the Nearest Local or Regional Hospital.
- 8. The Grantee Maintains MOAs with Local Law Enforcement.

The grantee will develop written agreements with local and service area law enforcement agencies for the handling of psychiatric emergencies, including protocols for grantee mental health professionals and master's level clinicians to provide face-to-face screening and assessment at jails, juvenile detention facilities (if located within 50 miles of the grantee's clinic), and local hospitals. Screening and assessment shall include petitioning for commitment orders, if necessary and regular re-assessments of persons in crisis being held for transport.

9. <u>The Grantee May Rely on Associated Community/Village Persons to Assist When the Crisis is More than 50 Miles</u> from a CBHC Office.

Source: Other CBHTR Grants FY 2014-16

Outpatient Treatment for Adults with Serious Mental Illness (Program Type #11)
Adult Residential and Housing Services for Seriously Mentally Ill Adults (Program Type #6)

• "24/7 emergency on-call/response capability for enrolled clients"

Outpatient Opioid Treatment Services (Program Type #8)

• "24 hours crisis coverage for enrolled patients"

Outpatient Services for High Risk Children in Early Childhood and/or Youth with Serious Emotional Disturbance (SED) and their Families (Program Type #9)

• 24/7 emergency on-call response capability for enrolled clients

Youth and Family Outpatient Substance Use Disorder Treatment (Program Type #10)

"24 hour crisis coverage for enrolled clients"

Funding and Reimbursement - Policies, Regulations and Statutes

This section of the report examines policies, regulations, and statutes related to the funding and reimbursement of BH crisis response services. Typically, states, the federal government, and local governments, establish statutory authority to appropriate funds for BH services and adopt regulations and policies governing the use of the funding and reimbursement procedures. In addition, non-profit agencies may make grant awards for BH services and programs, and private insurance companies may reimburse for services provided within plan benefits and eligibility. Alaska is a typical state in this regard. The scope of the summary provided in this section is limited to those regulations that affect reimbursement for crisis response services.

Alaska's system to provide mental health and substance abuse services is financed through multiple sources. These primarily include the State and federal government, the federal-state Medicaid program, the federal Medicare program, private insurance coverage, patients' out-of-pocket expenditures, and a host of smaller public and private programs. This section of the report discusses the BH funding streams available to support the funding of crisis response services, and includes an analysis of per capita psychiatric emergency (crisis response) services grant allocations made by the DBH. While providing a general description of funding sources for all BH services, the focus of this section is in describing funding sources for crisis response services. More information about the funding of treatment and recovery services and prevention and early intervention services will be provided in Reports 2 and 3 (respectively) of this Scan.

DBH Community BH Treatment and Recovery (CBHTR) Grants

DBH receives State General Fund and federal block grant funds to fund the Comprehensive Behavioral Health Treatment and Recovery Grant Program (CBHTR) and to provide psychiatric emergency services (PES) to all people in the grantee's service area who are in need of emergency BH services, regardless of ability to pay. PES may include: crisis intervention; brief therapeutic interventions for stabilization; and family, consumer, and community wrap-around supports. Higher levels of acuity and severity may require referral to higher levels of care within the treatment continuum including API or a hospital (i.e. Designated Evaluation & Stabilization /Designated Evaluation & Treatment facility).

CBHTR and PES Allocations. In FY12-13, DBH made grant allocations for all CBHTR program types totaling approximately \$62.5 million. Of this amount, DBH allocated approximately \$6.0 million (or 10.4 percent) of this amount for PES grants. Please note these FY12-13 grant allocation amounts do not reflect the final grant allocation amounts for FY12-13 or actual grant expenditures for FY12-13. According to DBH staff, final grant allocation amounts and final provider expenditure amounts are not currently available for FY12-13 or FY13-14 at the provider level. Therefore, this report uses FY12-13 grant allocation amounts for the per capita analysis provided below.

DBH indicates PES requests are entirely local grantee decisions, based on their analysis of the need for PES and any other funding resources for the management of the remainder of their BH grant programs (the other three core components, after PES, are Severe Mental Illness (SMI) adult services; Severe Emotional Disturbance (SED) services for children and youth; and Substance Use Disorder (SUD) services for adults and youth). DBH indicates no grantee has really been granted any substantial increase in many years, so the budgets they submit, by components or program types,

may reflect their actual needs; however, when the time comes to award the grants, they are asked by the Division to amend their submitted budgets to basically not exceed their grant from the previous year, regardless of how much they may have requested in their original response to the RFP.

<u>PES Allocations by Provider</u>. Table 8 details the amount of PES funds allocated, by provider, for FY12-13. The table also provides per capita allocation amounts. As the table indicates, the average PES grant allocation per capita for all Alaska residents in the combined grant service areas was \$9.37 for FY12-13. Per capita funding amounts range from \$2.38 in Ketchikan to \$504.88 in Nenana.

<u>Funding Analysis</u>. While it is not possible to definitively use these data to draw conclusions about the equity of PES grant funding allocations between service areas, comparative observations are possible. For example, the amount of PES funding per capita provided to the Mat-Su DBH service area, with a population totaling is 96,074 residents, is far less than the amount provided to Fairbanks and Juneau, the next two largest population centers, respectively. In addition, both Fairbanks and Juneau have DET beds, also funded by DBH through federal and State Disproportionate Share Hospital (DSH) funds. While one may argue that the proximity of Mat Su to Anchorage serves to mitigate the need for an equivalent level of PES funding, the size of the Mat Su population, and the negative impacts the current crisis response situation is creating for individuals, providers, and first responders, argues that additional PES funding and services are needed.

Table 8. State of AK PES Funding per Capita by Region

			%	FY13	PES	
Service Area	Grantee Agency	FY13 PES	Of	Projected	Per Capita	
		Award	Total	Population	Allocation	
Anchorage	Providence Crisis Recovery Center					
	(\$1,184,300) and Southcentral Foundation (\$38,627)	\$1,222,927	19.3%	301,558	\$4.06	
Barrow	North Slope Borough					
Bethel	Yukon-Kuskokwim Health Corporation	25,846	\$25.15			
Copper Center	Copper River Native Association	\$47,469	0.8%	3,032	\$15.66	
Cordova	Sound Alternatives (Cordova Community Medical Clinic)	\$63,559	1.0%	2,452	\$25.92	
Dillingham	Bristol Bay Area Health Corporation	\$61,784	1.0%	7,975	\$7.75	
East Aleutian	Eastern Aleutian Tribes	\$43,733	0.7%	3,281	\$13.33	
Islands						
		4			40	
Fairbanks	Fairbanks Community BH Center	\$542,848	8.6%	59,614	\$9.11	
Haines	Lynn Canal Counseling Services	\$32,979	0.5%	3,605	\$9.15	
Juneau	Council of Athabascan Tribal Governments;	\$199,904	3.2%	33,812	\$5.91	
Janeaa	Juneau Alliance for Mental Health, Inc.	7133,304	3.270	33,012	75.51	
	Juneau Youth Services					
Kenai/Soldotna	Peninsula Community Health Services of	\$195,087	3.1%	37,101	\$5.26	
	Alaska					
Ketchikan	Gateway Center for Human Services (Akeela, Inc.)	\$36,397	0.6%	15,291	\$2.38	
Kodiak	Providence Kodiak Island Counseling Center	\$97,835	1.5%	13,824	\$7.08	
Kotzebue	Maniilaq Association	\$294,186	4.6%	3,202	\$91.88	
McGrath	Southcentral Foundation (McGrath)	\$75,753	1.2%	1,017	\$74.49	
Nenana	Railbelt Mental Health & Addictions	\$201,446	3.2%	399	\$504.88	
Nome	Norton Sound Health Corporation	\$151,079 2.4% 9,		9,875	\$15.30	
Mat-Su	Mat-Su Health Services, Inc.	Health Services, Inc. \$255,360 4.0% 96,07		96,074	\$2.66	
5	2	6402 724	2.00/	2.246	657.42	
Petersburg	Petersburg Mental Health Services	\$183,731	2.9%	3,216	\$57.13	
SEARHC Region	SouthEast Alaska Regional Health Consortium	\$36,400	0.6%		N/A	
Seward	Seaview Community Services	\$55,279	0.9%	5,458	\$10.13	
Sitka	Sitka Counseling and Prevention Services	\$123,038	1.9%	9,727	\$12.65	
TCC Region	Tanana Chiefs Conference, Inc.	\$418,864	6.6%	5,650	\$74.14	
Tok	Tok Area Counseling Center	\$224,823	3.6%	2,673	\$84.11	
Valdez	Providence Valdez Counseling Center	\$93,184	1.5%	4,101	\$22.72	
West Aleutian/	Aleutian Pribilof Islands Association	\$68,780	1.1%	5,833	\$11.79	
Pribilof Islands						
Wrangell	Alaska Island Community Services	\$200,634	3.2%	<u>2,779</u>	\$72.20	
	STATE TOTAL	\$6,329,135	100%	675,111	\$9.37	

Table 8. Data Sources and Notes: 1) FY13 population projections from the ADOLWD. 2) DBH "Community Planning and Service Area List - FY 13 Grantees" document was used to calculate municipality population projections for each service area. Thus, the state population total does not match the DOLWD state population total, as all municipalities include the DBH service area list. 3) Southeast Alaska Regional Health Consortium funding per capita cannot be calculated as Native populations overlap with non-Native populations in the same municipality.

Medicaid Funding for Crisis Services

The Medicaid program in Alaska is equally funded by the federal and state government (50 percent federal funds, and 50 percent state funds).

<u>Crisis Intervention Services</u>: Alaska's Medicaid Program provides funding to a community BH services provider or mental health physician clinic for short-term crisis intervention services provided by a mental health professional clinician. Short-term crisis intervention includes the following treatment and supports:

- Individual or family psychotherapy
- Individual or family training and education related to resolving the short-term crisis and preventing a future crisis
- Monitoring the recipient for safety purposes

<u>Crisis Stabilization Services</u>: Medicaid also reimburses for crisis stabilizations services provided by a substance use disorder counselor or BH clinical associate. Stabilization services are the appropriate BH rehabilitation services necessary to return the recipient to the recipient's mental, emotional, and behavioral level of functioning before the short-term crisis occurred. Short-term crisis stabilization includes the following treatment and supports:

- Individual or family counseling needed in response to the short-term crisis
- Individual or family training and education related to resolving the existing short-term crisis and preventing a future crisis
- Monitoring the recipient for safety purposes
- Any BH rehabilitation services

<u>Clinical Assessments</u>: Medicaid reimburses appropriate providers for various clinical assessments that may be performed for an individual experiencing a BH crisis.

<u>Inpatient Psychiatric Services</u>: In the event an individual experiencing a BH crisis requires inpatient hospitalization, Medicaid will pay for inpatient psychiatric hospital services for individuals under age 21 and age 65 and older with service authorization (SA). Following admission and plan of care development, the facility must provide therapeutically appropriate, medically necessary diagnostic and treatment services to the recipient.

<u>Transportation Services</u>: The PES grant requirements state that the grantee must arrange for secure transportation of the individual in crisis to evaluation or treatment services at a DES or a DET Hospital, or Alaska Psychiatric Hospital (API). The Alaska Medicaid Provider Manual states that travel to inpatient psychiatric facilities may be authorized for the individual receiving care, as well as one parent, legal guardian, or designee approved as an escort. A second escort may be authorized by DBH when it is medically necessary.

<u>Funding</u>: Data are not currently available from the DBH to provide expenditures for Medicaid-reimbursed crisis response services. When these data become available, they will be included in a subsequent report.

Medicaid Disproportionate Share Hospital (DSH) Funding

The federal government provides support to hospitals that treat a high number of uninsured individuals through the DSH funding mechanism. The Medicaid DSH program is governed by specific state regulations. In Alaska, these regulations effectively limit the use of Medicaid DSH funds to providing emergency psychiatric response and treatment. Four hospitals in Alaska are currently funded by the Medicaid DSH program; API, the two DET hospitals (Bartlett Regional Hospital and Fairbanks Memorial Hospital), and Providence Alaska Medical Center.

The total federal share of the DSH allotment to Alaska in 2013 was approximately \$21.4 million. Thirty-three percent of the federal allotment must be spent on eligible Institutes for Mental Diseases (IMD). API is the only hospital that meets IMD DSH criteria, and they received 33 percent of the 2013 federal allotment, matched by state general funds. DSH funds were also utilized to pay for a portion of legitimate uncompensated care at the State's two contracted Designated Evaluation and Treatment (DET) units at Bartlett Regional Hospital and Fairbanks Memorial Hospital, as well as psychiatric emergency services at Providence Alaska Medical Center.

For FY13, these payments represent 50.7 percent of the total DSH payments that could be made, if the full federal allotment had been matched by the State of Alaska. For FY14, the total federal share of the DSH allotment to the state of Alaska is \$21.7 million including \$7.17 million that must be spent on eligible IMD.

By federal law, states are allowed to provide these funds to eligible hospitals to offset broader uncompensated care costs. However, there have not been Alaska state funds available to match the federal allotment (at 50 percent). The FY13 unused DSH allotment was \$10.5 million. If this amount had been matched by state funds, the available additional DSH funding would have been \$21.1 million. The table below shows the Medicaid DSH payments by the State of Alaska in 2013 to eligible hospitals:

Table 9. Medicaid DSH Payments by the State of Alaska in 2013 by Hospital

Name of Facility	Federal Share DSH	State Share DSH	Total Payment Amount	DSH Program
Alaska Psychiatric				
Hospital	\$7,062,870	\$7,062,870	\$14,125,740	IMD
Bartlett Regional	\$1,378,931	\$1,378,931	\$2,757,861	DET
Hospital				
Fairbanks Memorial				
Hospital	\$1,145,928	\$1,145,928	\$2,291,855	DET
Providence Alaska	\$1,265,510	\$1,265,510	\$2,531,019	SPEP
Medical Center				
TOTAL PAYMENTS	\$10,853,238	\$10,853,238	\$21,706,475	

Source: Alaska State Hospital & Nursing Home Association, 2013

<u>Changes to DSH under the Affordable Care Act (ACA)</u>: The ACA contained provisions for reducing DSH allotments to states starting in 2014, under the assumption that the amount of uncompensated care that hospitals provide will significantly decrease due to more people having access to health insurance coverage, and the expansion of Medicaid programs. However, subsequent federal legislation delayed Medicaid DSH cuts until FY16, eliminating the FY14 cuts and moving the FY15 cuts one year later, to FY16; and added another year of Medicaid DSH cuts in 2023. According to the

Alaska State Hospital and Nursing Home Association, as a low-DSH state, Alaska will probably see a cut of around 1.4 to 1.7 percent with larger reductions expected beginning in FY2017. The hospital most at risk because of diminishing federal DSH funding is the Alaska Psychiatric Institute (API). The IMD payment limit is formula driven and represents approximately 33 percent of the Federal allotment. This must be matched by state funds. As the Federal allotment decreases, payments to API will also decrease under the existing payment methodology.

Medicare Funding

Medicare's role in financing BH care is much smaller than its overall role in the health system, where it finances nearly a fifth of spending. While Medicare does not provide specific benefits for crisis services similar to Medicaid, it provides for inpatient care and various outpatient services. Medicare Part A (hospital insurance) pays for mental health care as an inpatient in a general or psychiatric hospital. Part A covers room, meals, nursing care, and other related services and supplies. In a psychiatric hospital (instead of a general hospital), Part A only pays for up to 190 days of inpatient psychiatric hospital services during an individual's lifetime.

Medicare Part B (Medical Insurance) helps cover mental health services provided by doctors and other health care professionals if you're admitted as a hospital inpatient. Part B also covers outpatient mental health services that you generally get as a hospital outpatient or outside of a hospital, including visits with these types of health professionals:

- Psychiatrist or other doctor
- Clinical psychologist
- Clinical social worker
- Certain other health care professionals

Part B helps pay for these covered services:

- One depression screening per year
- Individual and group psychotherapy
- Family counseling, if the main purpose is to help with your treatment
- Certain lab and diagnostic tests
- Psychiatric evaluations
- Medication management
- Certain prescription drugs, like some injections
- Activity therapies, such as art, dance or music therapy
- Occupational therapy
- Training and education (such as training on how to inject a needed medication or education about conditions)
- Substance abuse treatment
- Laboratory tests

In some cases, Part B may also pay for partial hospitalization services (an intensive, structured program of outpatient psychiatric services provided to patients as an alternative to inpatient psychiatric care). Medicare prescription drug coverage (Part D) plans are required to cover all (with limited exceptions) antidepressant, anticonvulsant, and antipsychotic medications.

Individuals qualify for Medicare at age 65 and older if they:

- are a U.S. citizen or a permanent legal resident; and either the individual or their spouse are
 eligible for Social Security or railroad retirement benefits usually having earned 40 credits
 from about 10 years of work even if the individual is not yet receiving these benefits; or,
- or their spouse are a government employee or retiree who has not paid into Social Security but has paid Medicare payroll taxes while working.

Individuals who do not qualify on their own or spouse's work record may receive benefits provided they are a US citizen or have been a legal resident for at least five years, provided they pay a premium amount per month.

Individuals qualify for Medicare under the age of 65 if they:

- have been entitled to Social Security disability benefits for at least 24 months (which need not be consecutive); or
- receive a disability pension from the Railroad Retirement Board and meet certain conditions; or
- have Lou Gehrig's disease (amyotrophic lateral sclerosis), which qualifies you immediately;
 or
- have permanent kidney failure requiring regular dialysis or a kidney transplant and you or your spouse has paid Social Security taxes for a certain length of time, depending on your age.

Veterans Administration BH Crisis Response Services

The federal Veterans Administration (VA) operates a 24 hour/7 day per week/365 day/year crisis line, online chat, and text services. According to the VA website, emergency mental health care is available 24 hours per day, 7 days per week at VA medical centers. If a VA medical center does not have a 24-hour emergency room, it must provide these services through a local, non-VA hospital. Telephone evaluations at VA medical centers are also available 24/7. Very large (more than 10,000 veterans per year) community based outpatient clinics (CBOC) have crisis response services available during business hours and direct individuals to local emergency rooms for afterhours services.

In non-emergent situations, veterans are required to talk with a VA primary care provider. The primary care provider may start medication and will help the veteran manage the problem. In other cases, the primary care provider may refer the veteran to a mental health specialist. At medical centers and very large CBOC, the veteran may be seen the same day by a mental health specialist working in the primary care clinic. If the veteran is being seen in a smaller CBOC or if the veteran needs more comprehensive care, the veteran will be referred to a mental health specialty clinic for an appointment within 14 days. Report 2 of the Scan will provide a more in-depth review of services available to Mat-Su military members and veterans.

Provider and Facility Licensure / Certification - Policies, Regulations and Statutes

Policy Summary – Integrated Regulations. DBH promulgated integrated substance use disorder and mental health regulations effective October 1, 2011. A more comprehensive summary and review of these regulations will be included Report 2 of the Foundation's BH Environmental Scan. The scope of the summary provided in this report is limited to those regulations that affect the provision of crisis response services.

Table 10. Provider and Facility Licensure/Certification - Policies, Regulations, and Statutes

DBH Provider qualifications and accreditation (effective July 1, 2015) Source: 7 AAC 135.990(22); 7 AAC 160.990 (b) (86)

Providers must meet the following qualifications:

- be a city, borough, or other political subdivision of the state or a nonprofit corporation;
- be receiving money from the department;
- if providing BH clinic services, must have a documented formal agreement with a physician for the purpose of providing general direction and direct clinical services;
- must collect and report the statistics, service data, and other information requested by the department;
- must participate in the department's service delivery planning;
- must maintain a clinical record for each recipient in accordance with the standards used for the Medicaid program;
- must have policies and procedures in place that incorporate the recipient's personal financial circumstances when determining the amount a recipient is required to pay for services;
- may not deny treatment to an otherwise eligible recipient due to the recipient's inability to pay for the service;
- may not supplant local funding available to pay for BH services or programs with money received from the state;
- must be a dual diagnosis capable program or dual diagnosis enhanced program; and
- must meet additional requirements if providing detoxification services or residential substance use treatment services.

After June 30, 2015, a BH services provider must be accredited to provide BH services by the Joint Commission; the Commission on Accreditation of Rehabilitation Facilities; the Council on Accreditation (COA); or an alternative accreditation agency approved by the Department.

SOURCE: 7 ACC 70.100

Policy Summary – Qualifications of Staff Providing Crisis Intervention and Crisis Stabilization Services.

As discussed earlier, *crisis intervention* services are considered "clinic services" and must be provided by a mental health professional clinician (MHPC), physician, physician assistant, or advanced nurse practitioner. A MHPC is:

- An individual who is working for an enrolled community BH services provider; is performing community
 BH services that are within that individual's field of expertise; and, has a master's degree or more
 advanced degree in psychology, counseling, child guidance, community mental health, marriage and
 family therapy, social work, or nursing.
- A nurse who has a master's degree in nursing; has received special training or experience in mental health; has an active license to practice nursing; and is working in the individual's field of expertise.
- A marital and family therapist who has an active license; and is working in the individual's field of expertise.
- A professional counselor who has an active license and is working in the individual's field of expertise.

- A social worker who has a master's degree in social work; has an active license to practice as a social worker; and, is working in the individual's field of expertise.
- A psychologist or psychological associate who has an active license and is working in the individual's field of expertise.

Crisis *stabilization* services are considered "rehabilitation services" and may be provided by substance use disorder counselor or a BH clinical associate.

- A substance use disorder counselor is an individual who, subject to the limits of the individual's education, training and experience, provides BH rehabilitation services with a focus on the treatment of substance use disorders, while working for a community BH services provider.
- A BH clinical associate is an individual who has less than a master's degree in psychology, social work, counseling, or a related field with specialization or experience in providing rehabilitation services to recipients with severe BH conditions; whose responsibilities may include provision of psychosocial evaluation, education related to a recipient's BH condition, encouraging and coaching, counseling, and teaching of needed life skills; and who works within the scope of the individual's training, experience, and education.

Provider and Facility Licensure / Certification / Accreditation

After June 30, 2015, an Alaska DBH BH services provider must be accredited to provide BH services by The Joint Commission; the Commission on Accreditation of Rehabilitation Facilities; the Council on Accreditation (COA); or an alternative accreditation agency approved by the Department. Providers have voiced concerns about this new accreditation requirement to DBH and in key informant interviews. The Division indicates that DBH rules will not conflict or overlap with accreditation requirements and that the requirement is a reasonable expectation to place on providers.

With regard to crisis response services, the Technical Assistance Collaborative (TAC) 2005 publication "A Community-Based Comprehensive Psychiatric Crisis Response Service" includes some of the essential policies, procedures, and protocols that a crisis response system must develop, including:

- staff and consumer safety
- informed consent for treatment
- psychiatric advance directives to communicate treatment preferences if advance of periods of incapacity
- staff training
- continuity and coordination of care
- seclusion and restraint
- level of care criteria for access to the spectrum of crisis services provided
- medications
- confidentiality and exchange of Information
- grievances and complaints

As the accrediting agencies listed in DBH regulations include standards requiring the above policies and procedures, DBH requirement that providers must be accredited will serve to meet the recommendations of the TAC.

Methodology

MSHF contracted with McDowell Group to conduct an analysis of the Mat-Su Borough Emergency Response System that focuses on BH issues such as mental health and substance abuse. The emergency system includes: first responders (911 dispatch, crisis line, law enforcement, and emergency medical services/ambulance), MSRMC ED, and the API.

An analysis of patient, visit, diagnosis, charge (cost), and first-responder data was conducted. Additionally, "hot-spot" analysis software was used to provide a snapshot of how the community uses its ED. GIS mapping helped interpret the ED and socioeconomic data at the Mat-Su Borough level. Additional information was gathered through interviews with MSRMC staff, first responders, and community-support agencies. National BH emergency response models and best practices were examined for insights relevant to the Mat-Su environment. A more detailed methodology description for this section of the report can be found in Appendix B.

EDs serve on the front-line of community health-care delivery and are places where all socioeconomic groups intersect. While designed to care for people with high needs at critical times, they increasingly serve patients with chronic conditions who may not receive or have access to services elsewhere in the health care system. Among those conditions are BH concerns. While EDs across the country are learning how to better handle patients with BH needs, the ED is one of the most expensive components of the health system. Therefore, it is not the optimum access point for these services in many cases, although it may be the only one considered by some patients.

This section will present the following data findings:

- First Responder BH-related Activity Data
- Analysis of MSRMC ED Data
- Analysis of MSR Urgent Care (UC) Data
- Emergency Response Costs for Individuals with BH Needs
- MSRMC ED Data Hot-spot Analysis

First Responder BH Activity Data

Besides the MSRMC ED, a combination of other entities provide critical emergency-response services in the Mat-Su Borough. They consist of 911 Dispatch, Alaska State Troopers, City of Palmer Police, City of Wasilla Police, and Emergency Medical Services (EMS or Ambulance). Additionally, the Crisis Line run by MSHS provides emergency support to people facing BH-related crises. A description of the various emergency response services may be found in Section 1 of this report.

Emergency-service coverage in Mat-Su is defined by Emergency Services Numbers (ESN) or sub-region. The maps below show which law enforcement or emergency medical/ambulatory agencies have jurisdiction in each ESN, as well as the location of ambulance and law enforcement stations and emergency health providers, including the MSRMC, MSR UC, Sunshine Community Health Center - Talkeetna, Mat-Su Public Health Center, Sunshine Community Health Center – Willow, MSHS.

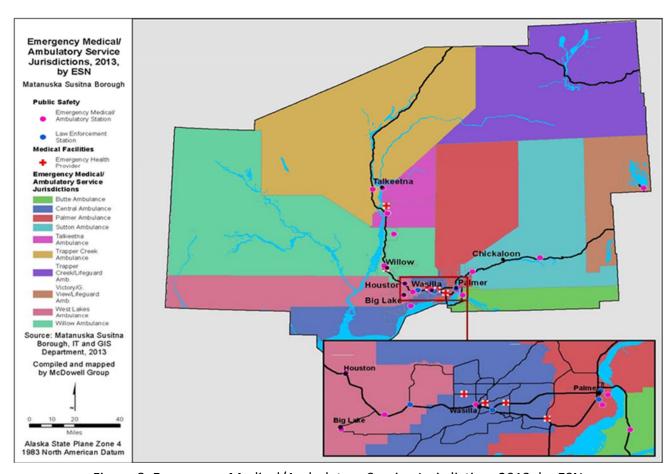


Figure 8. Emergency Medical/Ambulatory Service Jurisdiction, 2013, by ESN

911 Dispatch

There are two 911 dispatch centers in the Mat-Su Borough. The City of Palmer Emergency Dispatch is the central dispatch center for the Palmer Police Department, and Mat-Su Borough fire and EMS. All 911 calls go first to the Palmer dispatch, which is responsible for determining the priority-level of the call and the appropriate first responder. If the call is from outside the Palmer city limits, it is transferred to MatCom in Wasilla. MatCom, based at the Wasilla Police Department, is responsible for dispatching Alaska State Troopers, Alaska Wildlife Troopers, and the Wasilla Police Department. Of the 24,628 calls made to 911 in 2013, approximately 759 dispatched classified as BH-related; however, it is likely that once responders were on-site, more incidents may have involved BH-related issues than what dispatch was able to assess.

Alaska State Trooper Call Responses

The Alaska State Troopers provided data on BH-related emergency calls under the categories of Overdose, Suicide or Attempted Suicide, Driving Under the Influence (DUI), Sexual Assault, and Domestic Violence. In 2013, Alaska State Troopers responded to 851 BH-related calls in the Mat-Su Borough, including 366 for domestic violence and 360 DUI responses. Together these two types of calls represented 85 percent of all BH-related responses in 2013.

Table 11. Alaska State Troopers BH-related Call Responses, by Mat-Su Borough Community, Number and Percent, 2013

	Ov	erdose	Atten	cide, npted cide	D	UI	Sexual	Assault	Dom Viole		Total # by Area
	#	% of Total BH Calls	#	% of Total BH Calls	#	% of Total BH Calls	#	% of Total BH Calls	#	% of Total BH Calls	
Big Lake	2	4	0	0	12	24	6	12	30	60	50
Butte	0	0	0	0	0	0	0	0	1	100	1
Chickaloon	0	0	0	0	3	75	0	0	1	25	4
Eureka	0	0	0	0	1	100	0	0	0	0	1
Fairbanks	0	0	0	0	1	100	0	0	0	0	1
Houston	1	3	2	6	15	45	1	3	14	42	33
Meadow Lakes	1	10	0	0	0	0	2	20	7	70	10
Palmer	9	4	6	3	95	45	21	10	81	38	212
Sutton	0	0	1	9	7	64	0	0	3	27	11
Talkeetna	1	6	1	6	7	39	2	11	7	39	18
Trapper Creek	0	0	1	20	3	60	0	0	1	20	5
Wasilla	21	4	17	4	204	43	25	5	205	43	472
Willow	0	0	2	6	12	36	3	9	16	48	33
Total	35	4%	30	4%	360	42%	60	7%	366	43%	851

Source: Alaska State Troopers, 2013

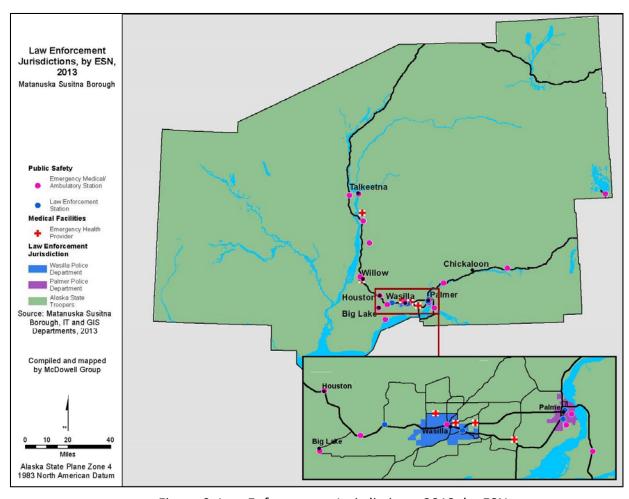


Figure 9. Law Enforcement Jurisdictions, 2013, by ESN

EMS/Ambulance Call Responses

Between 2007 and 2013, just over 3,000 calls resulted in dispatch of an ambulance (EMS team) to assist individuals with BH needs (see table below). Law enforcement (city police or Alaska State Troopers) may have responded to many of these same calls. The distribution of ambulance-dispatch calls across ambulance jurisdictions is presented on the next page. Over one-third (36 percent) of all BH calls responded to by EMS personnel were related to suicide or attempted suicide. Since 2007, suicide and attempted suicide have been the most or second most common cause of ambulance responses to individuals with BH-related needs. In the intervening years, all of these types of calls trended upward.

Table 12. Ambulance Emergency BH-related Call Responses, by Ambulance Jurisdiction, Mat-Su Borough, Number and Percent, 2007-2013

Area Served	As	sault	Beha	vioral	_	inder the ence	Over	⁻ dose	Atten	cide, npted cide	Total BH Calls by Area
	#	% of Total BH Calls	#	% of Total BH Calls	#	% of Total BH Calls	#	% of Total BH Calls	#	% of Total BH Calls	#
Central	504	32	168	11	34	2	322	20	551	35	1,579
West Lakes	141	36	18	5	9	2	73	19	150	38	391
Sutton	104	32	31	10	44	14	54	17	93	29	326
Palmer	56	21	20	7	4	2	61	23	125	47	266
Willow	70	38	7	4	2	1	38	21	68	37	185
Talkeetna	47	32	19	13	3	2	27	18	53	36	149
Butte	34	33	5	5	3	3	19	18	42	41	103
Trapper Creek	6	32	0	0	0	0	6	312	7	37	19
Victory/ G.View/ Lifeguard	4	44	1	11	0	0	3	33	1	11	9
Total	966	32%	269	9%	99	3%	603	20%	1,090	36%	3,027

Notes: Reported calls are those for which an ambulance is dispatched.

Due to rounding, some rows may not add to 100 percent.

Source: Matanuska Susitna Borough, Department of Emergency Services, 2013

Table 13. Ambulance Emergency BH-related Call Responses, by Year, Mat-Su Borough, 2007-2013

ВН Туре	2007	2008	2009	2010	2011	2012	2013	Total
Suicide, Attempted Suicide	92	141	148	129	190	230	160	1,090
Assault	81	150	132	134	172	155	142	966
Overdose	65	76	86	77	101	100	98	603
Other Behavioral Issues	18	27	31	21	50	47	75	269
Driving under the Influence	6	5	21	15	20	16	16	99
Total Call Responses	262	399	418	376	533	548	491	3,027

Source: Matanuska Susitna Borough, Department of Emergency Services, 2013

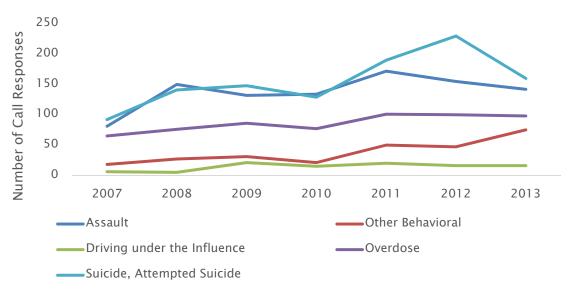


Figure 10. Ambulance Emergency BH-related Call Responses, by Year, Mat-Su Borough, 2007-2013

Source: Matanuska Susitna Borough, Department of Emergency Services, 2013

The map below shows the ESN for all BH emergency calls in 2013. A map of suicide or attempted suicide as a percent of these BH emergency calls follows.

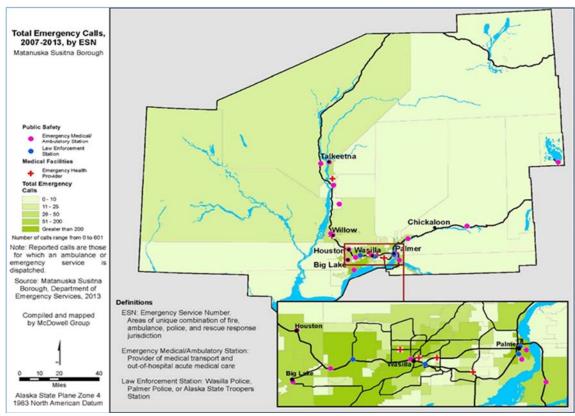


Figure 11. Total BH Emergency Calls, 2007-2013, by ESN

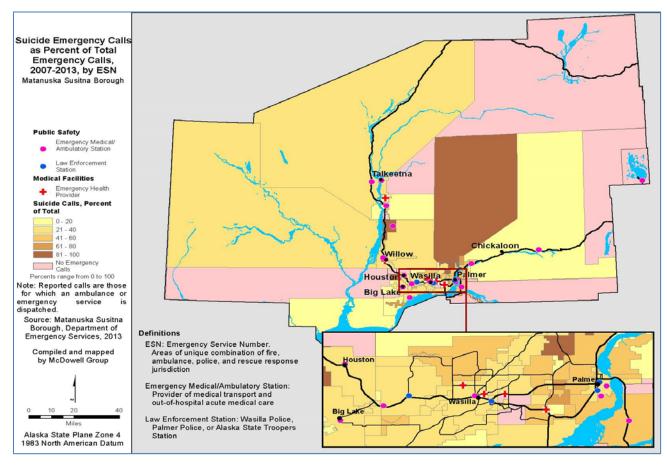


Figure 12. Total Suicide or Attempted Suicide Calls, 2007-2013, by ESN

Crisis Line

MSHS manages the psychiatric-emergency crisis-phone service (Crisis Line) for Mat-Su. The Crisis Line provides services 24 hours a day, seven days a week with Master's level clinicians responding to the phone calls. In FY14, the Crisis Line handled 214 psychiatric emergency calls.

MSHS also supports other Mat-Su organizations by providing 24-hour/daily in-person psychiatricemergency assessments on an on-call basis. These assessments identify the appropriate referral and response for the psychiatric emergency. The vast majority of these assessments occur within MSRMC, but they may also take place in other locations including jails, schools, etc. In FY14, MSHS conducted 329 emergency BH assessments.

Table 14. Number of Emergency BH Cases, FY2014

	Number
MSHS Crisis Line	214
MSHS drop-in/office	23
Emergency BH Assessments	329
 MSRMC ED/on-call intervention 	317
Other locations (jails, schools, etc.)	12

Source: MSHS, 2013

Analysis of MSRMC ED Data

The MSRMC ED is a critical component of the BH crisis-response system. As the Mat-Su Borough's only community hospital, MSRMC is available every day, around the clock, to provide life-saving medical services. This section of the report presents a statistical summary of MSRMC ED activities. Note that the term "BH Patient" means an MSRMC ED patient who during the year had at least one visit during which either a primary or subsequent BH diagnosis was made.

All ED Patient and Visit Volume

In 2013, 17,206 (16 percent of the Mat-Su Borough population) paid 26,971 visits to the ED. The table below shows selected ED-patient demographics.

Table 15. Demographic Summary, All ED Patients, Number and Percent Distribution, 2013

	ED Patients	Percent Total		Mat-Su Population	Percent of Total
Total Patients	17,206			96,074	
Age					
Under 15	3,537	21	*	22,703	24
15-19	1,284	7		7,049	7
20-29	2,864	17	*	11,577	12
30-39	2,307	13		12,570	13
40-54	3,078	18	*	20,433	21
55-64	1,760	10	*	12,776	13
65-74	1,309	8		6,011	6
75-84	757	4	*	2,284	2
85 and Older	310	2		671	1
Average Age	36.1			35.2	
Gender					
Female	8,947	52%		46,656	49%
Male	8,259	48		49,418	51
Insurance Type	17,206	100%			
Commercial	6,403	37%			
Medicaid	4,071	24			
Medicare	2,594	15			
Self-Pay	2,388	14			
Other	1,451	8			

Note: Insurer could not be determined for all patients. Insurance type by population is unavailable.

Due to rounding, some columns may not add to 100 percent.

Sources: MSRMC ED Dataset, ADOLWD

^{*} Indicates proportion of BH patients are statistically different from the total population at the 99 percent confidence interval level.

ED visits peak between 6:00 pm-7:00 pm, when the facility is five times busier than during the time of lowest use (4:00 am-5:00 am). Visits average 74 per day Monday through Thursday. Sunday is the busiest day of the week with an average of 84 visits. There is some seasonal variation in ED use with volume slightly higher in the summer months.

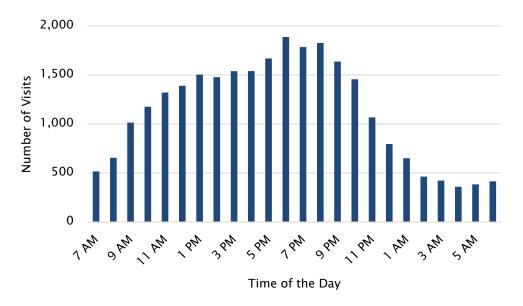


Figure 13. MSRMC ED, All Visits, By Time of Day, 2013 Source: MSRMC ED Database

Table 16. MSRMC ED, All Visits, By Daily Average, 2013

	Average Number of Visits
Weekday (Monday - Thursday)	74
Friday	77
Saturday	80
Sunday	84
Federal Holiday	88

National Comparison

The national comparisons shown in this report are calculated as a proportion of all ED visits. The table below provides a demographic comparison of MSRMC ED and US ED utilization. Generally, the demographic mix in the MSRMC ED does not differ significantly from the national demographic profile of patients visiting the ED.

Table 17. MSRMC ED Visits and National Comparisons

	M	ISRMC ED (2013)	All U.S. EDs (2011)
Total ED Visits		26,971	131,050,330
Age		% of Total	% of Total
Under 18		21	21
18 to 44		42	39
45 to 64		22	23
65 to 84		12	13
85 and Older		2	4
Gender		% of Total	% of Total
Female		58	54
Male		43	46
Insurance Type		% of Total	% of Total
Commercial		32	29
Medicaid		27	27
Medicare	re		22
Self-Pay	15		16
Other		8	5
Admission to the San	ne Hospital		
Percent of ED Visit	:S	13%	15%
Top 10 Primary Diagr	noses		
#1	Abdominal pair	า	Sprains and strains
#2	Sprains and stra	ains	Superficial injury, contusion
#3	Superficial injui	ry; contusion	Upper resp. infections
#4	Other nervous	system disorders	Abdominal pain
#5	Nonspecific chest pain		Nonspecific chest pain
#6	Upper resp. infections		Back problems
#7	Open wounds o	of extremities	Skin and subcutaneous tissue inf.
#8	Skin and subcut	taneous tissue inf.	Injuries due to external causes
#9	Open wounds o	of head and trunk	Urinary tract infections
#10	Injuries due to	external causes	Open wounds of extremities

Source: MSRMC ED Dataset; AHRQ HCUP, 2011

BH Patient and Visit Volume

In 2013, 14 percent (2,391 patients) of all MSRMC ED patients were diagnosed with a BH condition (either primary or subsequent diagnoses) in connection with at least one visit to the MSRMC. These patients accounted for 22 percent of all visits to the ED.

With respect to age and gender, BH patients are similar to other ED patients, except that children under age 15 make up just 5 percent of BH patients compared with 23 percent of MSRMC ED patients overall. Additionally, BH patients are less likely to have commercial insurance coverage and more likely to rely on Medicare or self-pay than ED patients in general. A BH patient averages 2.5 ED visits per year, compared to 1.4 visits per year for non-BH patients.

Table 18. MSRMC ED Demographic Summary, BH and Non-BH Patients, Number and Percent Distribution, 2013

		101 1 010	ent Distribution,			
	MSRMC ED		MSRMC ED		All MSRMC	% of
	Patients with BH	% of	Patients with	% of	ED Patients	Total
	Diagnoses	Total	No BH	Total		
			Diagnoses			
Total Patients	2,391		14,815		17,206	
Age Group	14%		86%		100%	
Under 15	116*	5	3,421	23	3,537	21
15-19	195	8	1,089	7	1,284	7
20-29	459	19	2,405	16	2,864	17
30-39	415	17	1,892	13	2,307	13
40-54	522	22	2,556	17	3,078	18
55-64	310	13	1,450	10	1,760	10
65-74	165	7	1,144	8	1,309	8
75-84	128	5	629	4	757	4
85 and Older	81	3	229	2	310	2
Gender						
Female	1,308	55	7,639	52	8,947	52
Male	1,083	45	7,176	48	8,259	48
Insurance Type						
Commercial	704*	29	5,699	38	6,403	37
Medicaid	531	22	3,540	24	4,071	24
Medicare	517*	22	2,077	14	2,594	15
Self-Pay	464*	19	1,924	13	2,388	14
Other	117	5	1,334	9	1,451	8
Unknown	58	2	241	2	299	2

Notes: A patient is defined as a BH patient if they have at least one BH diagnoses in the MSRMC ED during 2013.

^{*} Indicates that the percent of BH patients represented by that subset is statistically different at the 99 percent confidence level from the proportion of that subset among all MSRMC ED patients. Due to rounding, some columns may not add to 100 percent.

Table 19. MSRMC ED, BH and Non-BH Visits, Number and Percent Distribution, 2013

	MSRMC ED Visits With BH Diagnoses	% of Total	MSRMC ED Visits with No BH Diagnoses	% of Total	All MSRMC ED Visits
Total Visits	6,053	22%	20,918	78%	26,971
Average Visit per Patient	2.53		1.41		1.57

Note: A visit is defined as a BH visit if a BH diagnosis appears in either the primary or subsequent diagnostic

 $fields \ during \ the \ visit.$

Medicaid Patient Profile

A total of 531 MSRMC ED patients with a BH diagnosis are covered under Medicaid. Overall, these patients represent 13 percent of all MSRMC ED Medicaid patients. Patient under Medicaid, which includes Denali KidCare, are more likely to be younger than the average patient demographic profile. However, Medicaid patients under the age of 15 are significantly less likely to receive a BH diagnosis than Medicaid patients over age 15 (three percent compared to 21 percent). If patients under age 15 are factored out, the proportion of Medicaid patients with a BH diagnosis is similar in all remaining age groups.

While only representing 13 percent of all MSRMC ED Medicaid patients, Medicaid patients with a BH diagnosis make up 23 percent of the ED visits and 29 percent of the ED charges by all Medicaid patients. Medicaid patients with a BH diagnosis use the ED with more frequency, double the number of visits by Medicaid patients without a BH diagnosis (average of 3.0 annual visits compared to 1.6 annual visits).

Table 20. MSRMC ED Demographic Summary, BH and Non-BH Medicaid Patients, Number and Percent Distribution, 2013

	MSRMC ED Medicaid Patients with BH Diagnoses	% of Total	MSRMC ED Medicaid Patients with No BH Diagnoses	% of Total	All MSRMC ED Medicaid Patients	% of Total
Total Patients	531	3,540		4,071		3,540
Age Group						
Under 15	63	1,754	50	1,817	45	1,754
15-19	99	400	11	499	12	400
20-29	123	581	16	704	17	581
30-39	105	357	10	462	11	357
40-54	86	303	9	389	10	303
55-64	51	123	3	174	4	123
65-74	1	16	<1	17	<1	16
75-84	2	6	<1	8	<1	6
85 and Older	1	0	0	1	<1	0
Gender						
Female	332	2,027	57	2,357	58	2,027
Male	199	1,513	43	1,712	42	1,513
Other	531					
Total estimated ED charges	\$4,583,710	29%	\$11,071,9 10	71%	\$15,655,620	
Total visits	1,605	23%	5,504	77%	7,109	100%
Average visit per						
Medicaid patient	3.0		1.6		1.8	

Note: Based on patient's primary insurance.

Medicare Patient Profile

Twenty percent (or 517 Medicare patients) of all MSRMC ED Medicare patients received a BH diagnosis during their visit to the ED in 2013.⁴ While Medicare coverage is predominantly for people age 65 and over, 37 percent of Medicare patients with a BH diagnosis were under age 65, compared to 22 percent of Medicare patients under age 65 without a BH diagnosis.⁵

Medicare patients with a BH diagnosis represented 33 percent of the ED visits and 33 percent of the ED charges for all Medicare patients using the MSRMC ED. They also visited the ED twice as many times as Medicare patients without a BH diagnosis (3.1 visits compared to 1.5 visits annually). Fifty-six percent of Medicare patients with a BH diagnosis were discharged home, and 40 percent were admitted to MSRMC. While MSRMC ED Medicare patients who received a BH diagnosis in 2013 represented 22 percent (517 patients) of all MSRMC ED patients with a behavioral health diagnosis (2,391 patients), they represented 49 percent of all admissions to MSRMC (630 Medicare admissions out of a total of 1,294 MSRMC admissions of all patients with a BH diagnosis).

Table 21. MSRMC ED Medicare Patients, BH and Non-BH Patients, by Age and Gender

	MSRMC ED Medicare Patients with BH	% of Total	MSRMC ED Medicare Patients with No	% of Total	All MSRMC ED Medicare	% of Total
	Diagnoses		BH Diagnoses		Patients	
Total Patients	517		2,077		2,594	
Age						
20 to 39	39	8	96	5	135	5
40 to 54	77	15*	154	7	231	9
55 - 64	77	15	199	10	276	11
65 and Older	324	63*	1,628	78	1,952	75
Gender						
Female	322	62*	1,142	55	1,464	56
Male	195	38*	935	45	1,130	44
Other						
Total estimated ED charges	\$5,465,046	33%	\$10,973,513	67%	\$16,438,559	
Total visits	1,588	33%	3,185	67%	4,773	100%
Average visit per Medicare patient	3.1		1.5		1.8	
Admitted to MSRMC	630	40%	913	39%	1,543	32%
Discharged Home	887	56%	2,180	68%	3,067	64%

^{*} Indicates that the percent of BH patients represented by that subset is statistically different at the 99 percent confidence interval level from the proportion of that subset among all MSRMC ED patients.

Source: MSRMC ED Dataset, 2013

⁵ Medicare eligibility under age 65 includes people with end-stage renal disease, amyotrophic lateral sclerosis (ALS), and people who have been on Social Security Disability Insurance for more than two years.

⁴ While no analysis was conducted on why Medicare patients are more likely to use the ED, one possible explanation may be related to limited access to some primary care providers who may be reluctant to accept Medicare patients.

Significantly, 33 percent of all MSRMC ED Medicare patients between the ages of 40 and 54 had a BH diagnosis. In contrast, 17 percent of MSRMC ED Medicare patients age 65 and older had a BH diagnosis.

Table 22. MSRMC ED Medicare Patients, Percentage of BH Patients, by Age

	MSRMC ED Medicare Patients with BH Diagnoses	All MSRMC ED Medicare Patients	% of Total Medicare Patients with BH Diagnosis
20 to 39	39	135	29
40 to 54	77	231	33
55 - 64	77	276	28
65 and Older	324	1,952	17
TOTAL	517	2,594	20%

Source: MSRMC ED Dataset, 2013

Due to the unique nature of Medicare and its eligibility restrictions, Medicare patients between the ages of 40 and 54 were further analyzed. In this age cohort, a Medicare patient with a BH diagnosis has more than twice as many visits per year as a Medicare patient without a BH diagnosis. Approximately 45 percent of visits by Medicare patients who had received a BH diagnosis during the year were not related to a BH diagnosis (primary or subsequent diagnosis).

Table 23. MSRMC ED Medicare Patients Age 40 to 54, BH and Non-BH Diagnosis

-	,		•
MSRMC ED	MSRMC ED	All MSRMC	% of Total
Medicare	Medicare	ED Medicare	MSRMC ED
Patients with	Patients with	Patients	Medicare
BH	No BH		with BH
Diagnoses	Diagnoses		Diagnosis
77	154	231	33%
3.66*	1.77	2.67	
345	272	617	56%
42	0	42	100%
77	0	77	100%
226	272	498	45%
	Medicare Patients with BH Diagnoses 77 3.66* 345	Medicare Patients with BH Diagnoses 77 154 3.66* 1.77 345 272 42 0 77 0	Medicare Patients with BH DiagnosesMedicare Patients with No BH DiagnosesED Medicare Patients771542313.66*1.772.673452726174204277077

^{*}The average number of visits per patient excludes an outlier super-utilizer with 67 visits in 2013.

Source: MSRMC ED Dataset 2013

Of the 77 MSRMC ED Medicare patients with a BH diagnosis (age 40-54), 22 patients were high utilizers (visiting the ED five or more times a year). Furthermore, in this age cohort, the top three primary BH diagnoses were schizophrenia and other psychotic disorders, anxiety disorders, and substance-related disorders. Adding in subsequent diagnoses, the top three BH diagnosis were anxiety disorders, substance-related disorders, and mood disorders.

Table 24. MSRMC ED Medicare Visits, by Patients Age 40 to 54, by BH Diagnosis

BH Diagnosis	MSRMC ED Medicare Visits with Primary BH Diagnoses	MSRMC ED Medicare Visits with Primary and Subsequent BH Diagnoses
Schizophrenia and other psychotic disorders	12	17
Anxiety disorders	11	35
Substance-related disorders	9	31
Alcohol-related disorders	4	18
Suicide and intentional self-inflicted injury	3	7
Mood disorders	2	30
Attention-deficit, conduct, and disruptive behavior disorders	1	1
Developmental disorders	0	3
Delirium, dementia, and amnestic and other cognitive disorders	0	2
Adjustment disorders	0	1
All Visits with a BH Diagnosis	42	119

Note: The total for primary and subsequent visits is less than the sum as a visit may have more than one diagnosis. Only patients between ages 40 and 54 with Medicare insurance and at least one BH diagnosis during the year are included.

Source: MSRMC ED Dataset, 2013

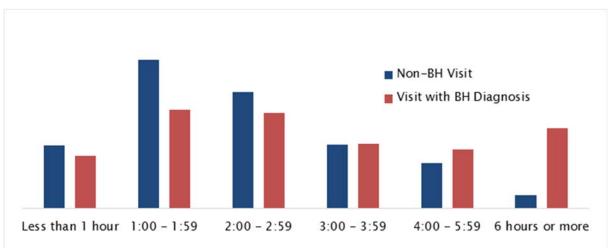


Figure 14. MSRMC ED Length of Stay, Percent of BH and Non-BH Visits, 2013

Note: A BH visit is defined as a visit if a BH diagnosis appears in either the primary or subsequent diagnostic fields during the visit. The number of visits with a BH diagnosis is less than the total visits by BH patients because a BH patient may have some visits that do not include a BH diagnosis during that visit.

BH Length of Stay

In 2013, the average Length of Stay (LOS) for patients admitted to the MSRMC ED and later discharged (not including patients admitted directly to the hospital) was 4.5 hours with a BH diagnosis, compared to 2.5 hours for a non-BH visit. One in 10 BH patients was in the ED for more than 10 hours, and 42 BH visits lasted 24 hours or longer.

Table 25. MSRMC ED Length of Stay, BH and Non-BH Visits, Number and Percent Distribution, 2013

	MSRMC ED Visits with BH Diagnoses	% of Total	MSRMC ED Visits with No BH Diagnoses	% of Total	All MSRMC ED Visits	% of Total
Total Discharged from ED	2,332	10%	21,150	90%	23,482	
Visits by Length of Stay						
<1 hour	270	12*	2,949	14	3,219	14
1 - 2:59	1,009	43*	12,424	59	13,433	57
3 - 5:59	637	27*	5,147	24	5,784	25
6 – 23.59	374	16*	499	2	873	4
24 hours or more	42	2*	131	1	173	1
Length of Stay (h:mm)						
Average Length of Stay	4:27*		2:32		2:44	
Median Length of Stay	2:45*		2:06		2:08	
75th Percentile	4:38*		3:07		3:13	
90th Percentile	10:16*		4:21		4:36	

Note: A visit is defined as a BH visit if a BH diagnosis appears in either the primary or subsequent diagnostic fields during the visit. The number of visits with a BH diagnosis is less than the total visits by BH patients because a BH patient may have some visits that do not include a BH diagnosis during that visit. Due to rounding, some rows and columns may not add to 100 percent. * Indicates BH visits for that subset are statistically different from total visits for the same subset at the 99 percent confidence Interval level.

Discharge Disposition

Discharge patterns differ between BH and non-BH ED visits; 62 percent of BH visits were discharged home, compared to 86 percent of non-BH visits. Admission to MSRMC occurred in 28 percent of BH visits, compared to 11 percent of non-BH visits. Ten percent of BH patients were transferred, compared to three percent of non-BH visits. These transfers were made to law enforcement, API, other hospitals and facilities, and also include leaving against the ED doctor's advice.

Table 26. MSRMC ED Discharge Disposition, BH and Non-BH Visits, 2013

Table 20. Wishive LD Discharge Dispe	orcion, bir and		-0
	MSRMC ED	MSRMC ED	All MSRMC ED
	Visits with BH	Visits with No BH	Visits
	Diagnoses	Diagnoses	
Total Visits	3,235	23,736	26,971
ED Discharge Disposition			
Admitted to MSRMC	903*	2,586	3,489
Percent Admitted	28%	11%	13%
Visits Discharged Home	1,997*	20,515	22,512
Percent Discharged Home	62%	86%	83%
Transferred Elsewhere	335*	635	970
Percent Transferred	10%	3%	4%
# Transferred to Law Enforcement	67*	51	118
# Transferred to API	131*	3	134
# Transferred to Other Hospital or	107*	366	473
Medical Facility			
# Left Against Advice	30*	215	245

Note: A visit is defined as a BH visit if a BH diagnosis appears in either the primary or subsequent diagnostic fields during the visit. * Indicates BH visits for that subset are statistically different from total visits for the same subset at the 99 percent confidence Interval level.

Diagnoses Associated with Admission

After excluding admissions for observation (545 visits), 2,944 visits resulted in admission to MSRMC. Of those, 762 visits included a BH diagnosis (primary or subsequent). The following table shows the top 10 primary diagnoses for admission from a BH visit and a non-BH visit. These top ten diagnoses represent 43.7 percent of BH visit admissions and 38.6 percent of non-BH visit admissions.

While ranking can differ, many of the leading diagnoses are similar for both BH and non-BH visit with a few exceptions. Alcohol- (#2) and substance-related (#3) disorders diagnoses, pancreatic disorders (#8), and poisoning by other medications and drugs (#10) fall within the top 10 BH diagnoses.

Table 27. Top 10 Primary Diagnoses Resulting in Admission to MSRMC, 2013

MSRMC ED Visit wit	th BH Diagnoses	Percent		RMC ED Visit with No BH gnosis	Percent
1. Septicemia (exc	cept in labor)	7.5	1.	Septicemia (except in labor)	5.5
2. Alcohol-related	disorders	6.4	2.	Pneumonia*	4.4
3. Substance-rela	ted disorders	3.7	3.	Acute myocardial infarction	3.4
4. COPD and bron	chiectasis	3.4	4.	Appendicitis and other appendiceal conditions	3.3
5. Pneumonia*		3.4	5.	Congestive heart failure; nonhypertensive	3.2
6. Urinary tract in	fections	3.3	6.	COPD and bronchiectasis	3.1
7. Acute and unsp	ecified renal failure	3.1	7.	Cardiac dysrhythmias	3.1
8. Pancreatic diso	rders (not diabetes)	3.0		Acute and unspecified renal failure	3.0
Poisoning by of drugs	ther medications and	2.8	9.	Skin and subcutaneous tissue infections	2.7
10. Skin and su infections	ubcutaneous tissue	2.6	10.	Urinary tract infections	2.5
All other diagnoses		56.3	All c	ther diagnoses	61.4

Note: Pneumonia excludes pneumonia caused by tuberculosis or sexually transmitted disease.

Admission is defined as a visit that was not discharged from the Emergency Department or Observation.

Source: MSRMC ED Dataset, 2013

Bounce Backs

"Bounce backs" occur when a patient returns to the ED for care within a relatively short period (such as 72 hours or a week). While there are many legitimate reasons for patients to return to the ED, a bounce back may also indicate the ED was not the best facility to address the initial condition or that the patient was unable or unwilling to obtain proper follow-up care elsewhere.

Table 28 shows the number of patients who returned to the MSRMC ED within 30 days of their previous visit, excluding planned visits for after-care and wound management. The table shows patient counts, rather than visits so that multiple re-visits by the same patient during the time periods shown are counted as a single bounce back event. The table shows bounce backs through the end of November for which the initial ED visit occurred February 1 or later. BH ED patients are 2.7 times more likely to bounce back than non-BH patients, both for 30-day bounce backs and 7-day bounce backs. Nearly 30 percent of all BH patients who visit the ED will be back within 30 days.

Table 28. MSRMC ED BH and non-BH Patient Bounce Back February-November, 2013

	MSRMC ED Patients with BH Diagnoses	% BH	MSRMC ED Patients with No BH Diagnoses	% Non- BH	All MSRMC ED Patients	% of Total
Did not return to ED within 30 days	1,311	71	10,823	89	12,134	87
Returned to ED within 30 days	546	29	1,323	11	1,869	13
Returned to ED within 7 days	297	16	728	6	1,025	7
All Patients	1,857	100%	12,146	100%	14,003	100%

Note: Only patients with an initial visit between February 1, 2013 and November 30, 2013 are included. Data excludes visits related to normal after-care.

Source: MSRMC ED Dataset, 2013

In an effort to further understand the relationship between BH patients making non-BH diagnosis visits to the ED, a cohort of patients was analyzed. The cohort included MSRMC ED patients who had made at least one ED visit during May to August 2013, more than one visit in 2013, and received a BH diagnosis during any visit in 2013.

A total of 807 patients with 3,731 visits met this criteria. These patients averaged 1.8 ED visits with a BH diagnosis and an additional 1.5 visits without a BH diagnosis in 2013.

Regardless of whether these 807 patients received a primary or subsequent BH diagnosis, the timing of their return to the ED did not seem to be affected. The median number of days until their next visit was 32. However, if a BH diagnosis was not made during the visit, the patient was likely to return 12 days sooner (median of 20 days).

Table 29. MSRMC ED BH Patient Cohort and ED Visits, 2013

	MSRMC ED Visit with BH Primary Diagnosis	MSRMC ED Visit with BH Primary or Subsequent Diagnosis	MSRMC ED Visit with No BH Diagnosis	All MSRMC ED Visits (BH and No BH Diagnosis)
Number of MSRMC ED Visits	524	1,473	2,258	3,731
Median Number of Days Until Next Visit	32	32	20	24
Average Number of Days Until Next Visit	49	50	38	43

Note: Cohort includes 807 MSRMC ED patients who made more than one visit to the ED in 2013, had received a BH diagnosis during any of their visits, and also made a visit between May and August 2013.

Source: MSRMC ED Dataset, 2013

Primary Diagnosis

Proportionally, the MSRMC ED is seeing similar rates to the US of ED Visits where a BH primary diagnoses is made.

Table 30. National Comparison of Proportion of MSRMC ED Visit where BH is a Primary Diagnoses, by BH Diagnosis Categories

	MSRMC ED	National
	Visits	ED Visits
	(2013)	(2011)
Percent of All ED Visits with a BH Primary Diagnosis	4.4%	4.1%
Percent of All ED with a Mental Health Primary Diagnosis	2.8%	2.7%
Percent of All ED with a Substance Abuse Diagnosis	1.6%	1.4%

Source: MSRMC ED Dataset. 2013, AHRQ, HCUP 2011

The top five primary diagnoses related to BH for MSRMC ED visits are:

- 1. Alcohol-related disorders (195 patients and 263 visits in 2013)
- 2. Suicide ideation, suicide attempts and intentionally inflicted self-injury (213 patients and 242 visits)
- 3. Anxiety disorders (199 patients and 239 visits)
- 4. Substance-related disorders (150 patients and 166 visits)
- 5. Mood disorders (80 patients and 88 visits)

Table 31. MSRMC ED Patients and Visits (2013), by Primary BH Diagnosis, 2013

	MSRMC ED Patients	MSRMC ED Visits
Total ED Patients/Visits	17,206	26,971
ED Patient/Visit with BH Primary Diagnosis	913	1,174
Alcohol-related disorders	195	263
Suicidal ideation, suicide and self-inflicted injury	213	242
Anxiety disorders	199	239
Substance-related disorders	150	166
Mood disorders	80	88
Schizophrenia and other psychotic disorders	61	76
Delirium, dementia, amnestic and cognitive disorders	33	35
Attention-deficit, conduct, & disruptive behavior disorders	28	29
Miscellaneous disorders	18	18
Adjustment disorders	11	12
Developmental disorders	5	5
Personality disorders	1	1

Source: MSRMC ED Dataset, 2013

Table 32. National Comparison of Proportion of MSRMC ED Visits by Primary BH Diagnosis

	%	%
	MSRMC ED Visits	National ED Visits
	(2013)	(2011)
Alcohol-related disorders	22	22
Suicidal ideation, suicide and self-inflicted injury	21	3
Anxiety disorders	20	16
Substance-related disorders	14	12
Mood disorders	7	24
Schizophrenia and other psychotic disorders	6	11
Delirium, dementia, amnestic and cognitive disorders	3	4
Attention-deficit, conduct, & disruptive behavior disorders	2	2
Miscellaneous disorders	2	3
Adjustment disorders	1	3
Developmental disorders	<1	1
Personality disorders	<1	<1
Disorders usually diagnosed in prior to adulthood	-	<1
Impulse control disorders, NEC	-	<1
Number of ED Visits with a Primary BH Diagnosis	1,174	5,312,682

Due to rounding, column may not add to 100 percent.

Source: MSRMC ED Dataset; AHRQ HCUP, 2011

Some general observations when comparing to national data include:

- Mat-Su men are less likely to have an alcohol-related disorder than men nationally.
- Suicide and intentionally self-inflicted injury is greater across most ages and genders in the Mat-Su.
- Mood disorders are less frequently seen in the ED across most ages and genders in Mat-Su.
- Generally, ED patients over the age of 85 are presenting fewer BH concerns than nationally.

The following tables provide demographic profiles for the top five primary BH diagnoses (by total visits).

Table 33. Alcohol-Related Disorders Primary Diagnosis, Demographic Comparisons, MSRMC ED Visits (2013) and National ED Visits (2011)

	MSRMC ED Visits	US ED Visits
ED Visits with an Alcohol-related Primary Diagnosis	263	1,155,162
Age	%	%
Under 18	3	3
18 to 44	48	47
45 to 64	45	45
65 to 84	4	4
85 and Older	0	0
Gender		
Female	45	28
Male	56	72
Insurance Type (% of Total)		
Commercial	32	22
Medicaid	17	25
Medicare	6	12
Self-Pay	40	35
Other	4	5
Admission to the Same Hospital		
Count of Admissions	52	206,226
Percent of ED Visits	20%	18%

Note: Due to rounding, some columns may not add to 100 percent.

Source: MSRMC ED Dataset, 2013; AHRQ HCUP, 2011

Table 34. Suicidal Ideation, Suicide Attempt, and Intentionally Inflicted Self-Injury Primary Diagnosis, Demographic Comparisons, MSRMC ED Visits (2013) and National ED Visits (2011)

	· ,	
	MSRMC	US ED
	Visits	Visits
ED Visits with a Suicidal Ideation and	242	142,086
Intentionally Inflicted Self-Injury Primary		
Diagnosis		
Age	%	%
Under 18	20	18
18 to 44	56	55
45 to 64	21	25
65 to 84	3	2
85 and Older	0	0
Gender		
Female	55	45
Male	46	55
Insurance Type (% of Total)		
Commercial	32	24
Medicaid	29	30
Medicare	9	14
Self-Pay	24	26
Other	6	5
Admission to the Same Hospital		
Count of Admissions	0	1,456
Percent of ED Visits	0%	1%

Note: Due to rounding, some columns may not add to 100 percent.

Source: MSRMC ED Dataset; AHRQ HCUP, 2011

Table 35. Anxiety Disorders Primary Diagnosis, Demographic Comparisons, MSRMC ED Visits (2013) and National ED Visits (2011)

The time (2013) and tradicinal 25 tions (2011)						
	MSRMC ED	US ED				
	Visits	Visits				
ED Visits with an Anxiety Disorder Primary	239	870,498				
Diagnosis						
Age						
Under 18	6	8				
18 to 44	62	59				
45 to 64	23	24				
65 to 84	8	8				
85 and Older	<1	1				
Gender						
Female	71	61				
Male	29	39				
Insurance Type (% of Total)						
Commercial	27	30				
Medicaid	37	26				
Medicare	17	17				
Self-Pay	16	22				
Other	3	4				
Admission to the Same Hospital						
Count of Admissions	0	26,438				
Percent of ED Visits	0%	3%				

Note: Due to rounding, some columns may not add to 100 percent.

Source: MSRMC ED Dataset; AHRQ HCUP, 2011

Table 36. Substance Abuse Disorders Primary Diagnosis, Demographic Comparisons, MSRMC ED Visits (2013) and National ED Visits (2011)

	MSRMC ED Visits	US ED Visits
ED Visits with a Substance Abuse Disorder Primary Diagnosis	166	626,932
Age	%	%
Under 18	6	5
18 to 44	72	65
45 to 64	20	25
65 to 84	2	4
85 and Older	0	1
Gender		
Female	50	40
Male	50	60
Insurance Type (% of Total)		
Commercial	25	20
Medicaid	27	32
Medicare	12	14
Self-Pay	32	29
Other	4	5
Admission to the Same Hospital		
Count of Admissions	37	140,103
Percent of ED Visits	22%	22%

Note: Due to rounding, some columns may not add to 100 percent.

Source: MSRMC ED Dataset; AHRQ HCUP, 2011.

Table 37. Mood Disorders Primary Diagnosis Demographic Comparisons, MSRMC ED Visits (2013) and National ED Visits (2011)

	MSRMC Visits	
ED Visits with a Mood Disorder Primary Diagnosis	88	1,257,897
Age	%	%
Under 18	22	13
18 to 44	50	54
45 to 64	26	28
65 to 84	2	5
85 and Older	0	<1
Gender		
Female	67	53
Male	33	47
Insurance Type		
Commercial	38	27
Medicaid	28	31
Medicare	6	19
Self-Pay	25	18
Other	3	5
Admission to the same hospital		
Count of Admissions	6	438,740
Percent of ED Visits	7%	35%

Note: Due to rounding, columns may not add to 100 percent.

Source: MSRMC ED Dataset; AHRQ HCUP, 2011

Primary Diagnosis by Age

People in different age groups have different BH needs. The following table shows the primary diagnoses for three age groups.

Table 38. Top Five BH Primary Diagnosis, by Age Cohort

Rank	Under Age 18	18 to 64 Years	65+ Years
1	Suicide/self-inflicted injury	Alcohol-related disorders	Anxiety disorders
2	ADD, conduct, & disruptive behavior disorders	Anxiety disorders	Delirium, dementia, and amnestic & other cognitive disorders
3	Mood disorders	Suicide/self-inflicted injury	Alcohol-related disorders
4	Anxiety disorders	Substance-related disorders	Schizophrenia / psychotic disorders
5	Substance-related disorders	Mood disorders	Suicide/self-inflicted injury

Primary Diagnosis and Comorbidities

Patients with BH needs often have multiple BH diagnoses. The following table shows the number of MSRMC ED patients with BH co-morbidities for the five most prevalent BH diagnoses. Over half (56 percent) of patients diagnosed with suicidal ideation also have a mood disorder. There does not appear to be a strong relationship between alcohol and substance abuse disorders with any of the other top mental health diagnoses. Awareness of co-morbidities can lead to better screening and possibly early detection and treatment of some conditions. In 2013, 12 percent of patients with a primary diagnosis of suicidal ideation had been to the ED within the previous 60 days.

Table 39. Number of Patients with Co-Morbidity of BH Disorders, by Top Five Primary BH Diagnosis, 2013

BH Diagnosis	Mood disorders	Anxiety disorders	Alcohol- related disorders	Substance- related disorders	Suicide and intentional self- inflicted injury
Mood disorders		188	64	86	166
Anxiety disorders	188		64	85	70
Alcohol-related disorders	64	64		56	63
Substance-related disorders	86	85	56		53
Suicide & intentional self-inflicted injury	166	70	63	53	
Schizophrenia & other psychotic disorders	34	20	12	25	27
ADD, conduct, and disruptive behavior disorders	25	24	6	8	15
Delirium, dementia, and amnestic and other cognitive disorders	23	17	8	7	3
Miscellaneous disorders	9	15	0	4	3
Adjustment disorders	8	12	4	6	7
Developmental disorders	8	3	3	6	2
Personality disorders	7	5	1	6	5
Disorders usually diagnosed in infancy, childhood, or adolescence	3	3	0	0	1

High Utilizers

For this study, a "high utilizer" is a patient who has used the ED five or more times in a year. In 2013, 594 ED patients (3 percent of all ED patients) were high utilizers and accounted for 4,429 visits (16 percent of all visits). Of those high utilizers, 305 patients had a BH diagnosis (primary or subsequent) and visited the ED 2,492 times, representing 51 percent of all high-utilizer patients and 56 percent of all high-utilizers visits. Of all ED use, BH high-utilizers represented 2 percent of all ED patients and 9 percent of all ED visits. The top 100 ED patients (10+ visits in 2013) accounted for 5 percent of all ED visits, of whom 66 percent were BH patients.

Table 40. MSRMC ED Patients and Visit Frequency, Number and % Distribution, 2013

Number of Annual Visits	All Patients	% of Total ED Patients	All Visits	% of Total ED Visits
1 visit	12,512	73	12,512	46
2	2,706	16	5,412	20
3-4	1,394	8	4,618	17
5-6	360	2	1,931	7
7-9	134	1	1,040	4
10-14	77	<1	901	3
15+	23	<1	557	2
TOTAL	17,206	100%	26,971	100%
High Utilizers (5+ visits)	594	3	4,429	16%
Super Utilizers (10+ visits)	100	<1	1,458	5
Ultra Utilizers (15+ visits)	23	<1	557	2

Source: MSRMC ED Dataset, 2013

Table 41. MSRMC ED BH Patients and Visit Frequency, 2013

Number of Annual Visits	MSRMC ED Patients with BH Diagnoses	All MSRMC ED Patients	% of MSRMC ED Patients	MSRMC ED Visits with BH Diagnoses	All MSRMC ED Visits	% of MSRMC ED Visits
1 visit	1,189	12,512	10	1,189	12,512	10
2	472	2,706	17	944	5,412	17
3-4	425	1,394	30	1,428	4,618	31
5-6	168	360	47	910	1,931	47
7-9	71	134	53	558	1,040	54
10-14	47	77	61	547	901	61
15+	19	23	83	477	557	86
TOTAL	2,391	17,206	14	6,053	26,971	22
High Utilizers (5+ visits)	305	594	51	2,492	4,429	56
Super Utilizers (10+ visits)	66	100	66	1,024	1,458	70
Ultra Utilizers (15+ visits)	19	23	83	477	557	86

Table 42. MSRMC ED Patient Demographics, High Utilizers (5+ ED Visits Annually), BH and Non-BH Patients 2013

			MCDMC FD Ub	0/	A II	0/
	MSRMC ED	% of	MSRMC ED High	% of	All	% of
	High		Utilizers Patients with	of Total	MSRMC	
	Utilizers Patients	Total	No BH Diagnoses	Total	ED High	Total
	with BH				Utilizers	
	Diagnoses				Patients	
Age Group	#	%	#	%	%	#
Under 15	2	1	26	9	28	5
15-19	11	4	19	7	30	5
20-29	51	17	85	29	136	23
30-39	52	17	51	18	103	17
40-54	77	25	46	16	123	21
55-64	51	17	24	8	75	13
65-74	27	9	16	6	43	7
75-84	22	7	12	4	34	6
85 and Older	12	4	10	3	22	4
Gender						
Female	182	60	187	65	369	62
Male	123	40	102	35	225	38
Insurance Type						
Commercial	51	17	56	19	107	18
Medicaid	86	28	101	35	187	31
Medicare	94	31	54	19	148	25
Self Pay	50	16	51	18	101	17
Other	19	6	21	7	40	7
Unknown	5	2	6	2	11	2
Total High Utilizer Patients (5+ Visits)	305	51	289	49	594	100%
Super Utilizers (10+ visits)	66	66	34	34	100	100%
Ultra Utilizers (20+ visits)	19	83	4	17	23	100%

Source: MSRMC ED Dataset, 2013

Table 43. MSRMC ED, BH and Non-BH Visits, High-Utilizers (5+ Annual Visits) Number and Percent Distribution, 2013

5+ Annual Visits	MSRMC ED High Utilizer Visits With BH Diagnoses	% of Total	MSRMC ED High Utilizer Visits With N BH Diagnose	0	
Total Visits	2,482	56%	1,937	44%	4,429
Average Visits per High- Utilizer Patient	8.17		6.70		7.46

Note: A BH visit is defined as when a BH diagnosis appears in either the primary or subsequent diagnostic fields during the visit.

Table 44. MSRMC ED, BH and Non-BH Discharge Disposition, High-Utilizers (5+ Annual Visits), Number and Percent Distribution, 2013

	MSRMC ED High Utilizer Visits With BH Diagnoses	MSRMC ED High Utilizer Visits With No BH Diagnoses	All MSRMC ED High Utilizer Visits
Total Visits	2,492	1,937	4,429
ED Discharge Disposition			
Discharged Home	1,892	1,665	3,557
Percent Discharged Home	76%	86%	80%
Admitted to MSRMC	469	220	689
Percent Admitted	19%	11%	16%
Transferred Elsewhere	131	52	183
Percent Transferred	5%	3%	4%
# Transferred to Law Enforcement	11	0	11
# Transferred to API	33	0	33
# Transferred to Other Hospital or Medical Facility	54	28	82
# Left Against Advice	33	24	57
Total Discharged	2,023	1,717	3,740

Analysis of MSR Urgent Care Data

In addition to the ED, MSRMC also operates an Urgent Care (UC) walk-in clinic open daily, evenings (closing at 7:00 pm Monday-Thursday) and weekends (9 am-5 pm). In 2013, five percent (569 patients) of the UC patients had BH-related diagnoses (compared to 14 percent of ED patients). These patients visited the UC an average of 2.57 times in 2013, for a total of 1,460 visits (8 percent of all UC visits).

Table 45. MSR UC Demographic Summary, BH and Non-BH Patients, Number and Percent Distribution, 2013, Number and Percent Distribution, 2013

	MSR UC Patients With BH Diagnosis	% of Total	MSR UC Patients with No BH Diagnosis	% of Total	All MSR UC Patients	% of Total
Total Patients	569		10,946		11,515	
Age Group	5%		95%		100%	
Under 15	32*	6	2,526	23	2,558	22
15-19	40	7	988	9	1,028	9
20-29	154*	27	1,857	17	2,011	17
30-39	150*	26	1,545	14	1,695	15
40-54	108	19	2,106	19	2,214	19
55-64	55	10	1,066	10	1,121	10
65-74	15	3	538	5	553	5
75-84	9	2	247	2	256	2
85 and Older	6	1	73	1	79	1
Gender						
Female	351	62	6,209	57	6,560	57
Male	218	38	4,737	43	4,955	43
Insurance Type						
Commercial	207*	36	5,092	47	5,299	46
Medicaid	151	27	2,414	22	2,565	22
Medicare	66	12	1,015	9	1,081	9
Self-Pay	136	24	2,032	19	2,168	19
Other	9	2	391	4	400	3
Unknown	0	0	2	0	2	0

Note: A patient is defined as a BH patient if they have at least one BH diagnoses in 2013.

Source: MSR UC Dataset, 2013

A total of 659 patients received their BH diagnoses at MSRMC ED, at MSR UC, or in both locations, and used both the ED and the UC in 2013, including: 521 patients who received their BH diagnosis at MSRMC ED; and 117 high utilizers of the MSRMC ED (5+ visits in 2013), representing 20 percent of all MSRMC ED high utilizers (594 total patients) and 22 percent of all MSRMC ED BH patients who used the UC.

^{*} Indicates MSH UC BH patients in that subset are statistically different from the total UC patient population at the 99 percent confidence interval level.

Table 46. MSR UC, BH and Non-BH Visits, Number and Percent Distribution, 2013

	MSR UC Visits With BH Diagnosis	% of Total	MSR UC Visits with No BH Diagnosis	% of Total	All MSR UC Visits
Total Visits	1,460	8%	16,911	92%	18,371
Average Visit per	2.57		1.54		1.60
Patient					

Note: A visit is defined as a BH visit if a BH diagnosis appears in either the primary or subsequent diagnostic fields during the visit.

Source: MSR UC Dataset, 2013

BH diagnoses during visits by patients using both the UC and ED were most likely to be related to anxiety or mood disorders, followed by substance-related disorders. However, these patients were more likely to be diagnosed during their UC visit with an anxiety disorder than when they visited the ED (42 percent of compared to 28 percent).

Table 47. Number of ED and UC Visits with BH Diagnoses, by Patients that Used Both UC and ED, by Type of BH Diagnoses, 2013

•		•	,	
	Number of Visits with BH Diagnosis		Percent of Total Visits with BH Diagnosis	
	ED	UC	ED	UC
Anxiety disorders	297	167	28	42
Mood disorders	204	91	20	23
Substance-related disorders	171	57	16	14
Alcohol-related disorders	157	17	15	4
Schizophrenia and other psychotic disorders	51	6	5	2
Suicide and intentional self-inflicted injury	75	1	7	0
Attention-deficit, conduct, and disruptive behavior disorders	28	22	3	6
Delirium, dementia, and amnestic and other cognitive disorders	27	6	3	2
Miscellaneous disorders	12	14	1	4
Adjustment disorders	9	7	1	2
Disorders usually diagnosed in infancy, childhood, or adolescence	7	4	1	1
Developmental disorders	4	1	<1	<1
Personality disorders	1	5	<1	1
Total Visits with BH Diagnosis	1,043	398	100%	100%

Note: Due to rounding, columns may not add to 100 percent.

Source: MSRMC ED and UC Datasets, 2013

Behavioral Health Emergency Response Costs

MSRMC ED BH-Related Cost Analysis

MSRMC ED served 17,206 patients who made a total of 26,971 emergency department visits in 2013, with total facility charges estimated at \$73.5 million. Fourteen percent of those patients received a primary or subsequent BH diagnosis sometime during 2013. Those BH patients accounted for 22 percent of all ED visits (6,053 visits), with facility charges estimated at \$19.5 million. BH patients with a primary BH diagnosis accounted for 1,174 visits and \$3.7 million in MSRMC ED charges.

Table 48. MSRMC ED - Estimated Charges, Visits, and Patients, 2013

	MSRMC ED with BH Diagnosis	MSRMC ED with No BH Diagnosis	All MSRMC ED Patients
ED facility charges (millions)	\$19.5	\$54.0	\$73.5
Visits	6,053	20,918	26,971
Patients	2,391	14,815	17,206

Note: MSRMC Emergency Department facility charges are estimates and exclude physicians, MSHS,

EMS, Law Enforcement, 911, and other associated costs.

Source: MSRMC ED Dataset, 2013

Detailed BH-Related Charge Analysis

Charge amounts vary considerably depending on the patient, diagnosis, and services required. Patients with BH issues typically require more resources than patients without them. The difference in charge amounts per visit is a reflection of the additional complexity associated with diagnosing and treating BH patients.

ED charge data is only available for patients who are discharged home. ED charges for patients who are then admitted to the hospital cannot be isolated from other hospital charges. Non-admitted patients with BH anywhere in their records had an average charge amount of \$3,421, 33 percent above the average for non-admitted patients without BH in their records.

To estimate total ED charges for all patients, including those who were admitted, ED costs for admitted BH patients were assumed to be the same as those for admitted non-BH patients. The average ED cost for all patients who were not admitted is used as a proxy for patients who were admitted. In other words, every patient who was admitted is assumed to have the average ED charge of \$2,730. The following table summarizes the results of that analysis.

Table 49. Estimated MSRMC ED Charges per Patient and Total

	MSRMC ED with BH Diagnosis	MSRMC ED with No BH Diagnosis	All MSRMC ED Patients
Visits per patient	2.53	1.41	1.57
Estimated charge per visit	\$3,230	\$2,580	\$2,730
Estimated charge per patient per year	\$8,170	\$3,650	\$4,270
Patients	2,391	14,815	17,206
Total ED facility charges (millions)	\$19.5	\$54.0	\$73.5

Source: MSRMC ED Dataset, 2013

BH Impact on Visit Costs

Among patients who were discharged home from the ED, a BH diagnosis is associated with significantly higher charges. The following table shows the average charge amounts by percentile for patients who were discharged home from the ED.

Table 50. ED Charge Amounts for Visits Where Patient was Discharged Home from ED

Cost	Average MSRMC	Average MSRMC	Average All
Distribution	ED Charges with BH	ED Charges with No	MSRMC ED
	Diagnosis	BH Diagnosis	Charges
10 th Percentile*	\$751	\$751	\$751
25 th Percentile	\$962	\$834	\$835
Median	\$2,437	\$1,501	\$1,561
75 th Percentile	\$4,661	\$3,434	\$3,559
90 th Percentile	\$6,739	\$5,964	\$6,029
Average for all Patients	\$3,221	\$2,558	\$2,615

Note: Only patients who were discharged home from the ED are included. Total 22,512 visits.

^{*10} percent of patient charges were \$751 or less.

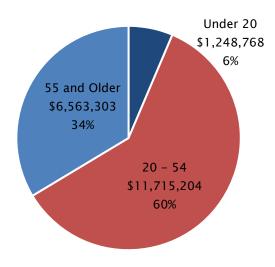


Figure 15. Estimated BH-related MSRMC ED Charges, by Age Source: MSRMC Dataset, 2013

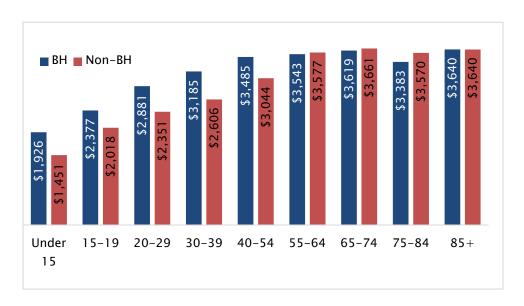


Figure 16. MSRMC ED Average Charge per Visit by Age, BH and Non-BH Patients Source: MSRMC Dataset, 2013

Charges by Age Cohort

As described earlier in this report, the age and gender distribution of people with BH problems who arrive at the ED is similar to the overall distribution of patients. BH patients over age 55 account for one-third (34 percent) of all ED costs for BH patients. Patients between 20 and 54 account for 60 percent, and those under 20 account for the remaining 6 percent. In contrast, non-BH patients under 20 represent 17 percent of ED charges for all non-BH patients.

Younger BH patients are more costly on a patient-by-patient basis than non-BH patients. On average, a visit by a BH patients under the age of 54 is 36 percent more costly than for a non-BH patient. After patients reach the age of 55, the charge-per-visit plateaus for both BH and non-BH patients at \$3,600.

Figure 16 shows the average charge per visit for BH patients and non-BH patients. The average ED charge and the proportion of patients discharged home for BH patients varies depending on the type of BH diagnosis, as shown in the following table.

Table 51. BH as Primary Diagnosis, Charges and Percent Admitted/Transferred, 2013

Primary Diagnosis	Percent Discharged Home	Average ED Charge
Alcohol-related disorders	74	\$4,041
Suicide and intentional self-inflicted injury	57	\$3,686
Anxiety disorders	95	\$2,278
Substance-related disorders	72	\$2,860
Mood disorders	72	\$2,750
Schizophrenia and other psychotic disorders	42	\$4,051

Note: Restricted to visits with BH as primary diagnosis and diagnosis categories with at

least 50 visits in 2013.

Source: MSRMC ED Dataset, 2013

BH and Length of Stay (LOS)

During interviews with nurses and physicians, there were reports of lengthy waits with BH patients while transportation arrangements were made and beds at the transfer facility became available. This is consistent with data showing that LOS for BH patients is significantly higher than for non-BH patients. With increased LOS, the charge amounts also increase. Unfortunately, comorbidities and a lack of data describing actual activities during the patient's stay make direct analysis of these factors difficult. To focus on the cost implications of patients waiting for transfer and to isolate other factors, records were analyzed for patients transferred to API from the emergency department with a primary diagnosis of suicide, suicidal ideation, and/or self-injury. Among those patients transferred to API, those with an LOS less than six hours had an average charge amount of \$2,744. Those transferred after longer than six hours had an average charge amount of \$4,523.

Charges by Discharge Disposition

Average charge amounts for BH patients also vary depending on where they go when they leave MSRMC ED. The following table shows the charge amounts for patients discharged from the ED to home, another hospital, law enforcement, and API.

Table 52. MSRMC ED Charge Amount by Discharge Disposition

Discharge Status	MSRMC ED Charges with BH Diagnosis	MSRMC ED Charges with No BH Diagnosis
Home/Self Care	\$3,197	\$2,558
Another Hospital	\$7,090	\$9,292
Law Enforcement	\$2,241	\$2,531
Alaska Psychiatric Institute	\$4,709	n/a

Note: Only visits where the patient was discharged from the ED are included.

Source: MSRMC ED Dataset, 2013

Charges by Diagnosis

ED visits by patients with at least one of the top five BH diagnoses accounted for \$17.3 million or 88 percent of all ED charges by BH patients. Including all BH diagnoses, charges totaled \$19.5 million.

Table 53. Total MSRMC ED Charges for Patients with a BH Primary or Subsequent Diagnoses, by BH Diagnosis

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	MSRMC ED	Visits to MSRMC ED	MSRMC ED Charges	MSRMC ED Charges per
	Patients with BH Diagnosis	by Patients with BH Diagnosis	Charges	Patient
Mood Disorders	702	2,107	\$6,699,327	\$9,543
Anxiety Disorders	673	2,265	\$7,042,314	\$10,464
Alcohol Disorders	559	1,312	\$4,698,736	\$8,406
Substance Abuse	509	1,681	\$5,578,813	\$10,960
Suicide, Suicidal Ideation, and Self-Injury	294	807	\$2,721,340	\$9,256
Patients with a Top 5 BH Diagnoses (Primary or Subsequent)	2,035	5,330	\$17,267,793	\$8,485
Other Patients without a Top 5 BH Diagnosis (Primary or Subsequent)	356	723	\$2,259,482	\$6,347
All Patients with a BH Diagnosis (Primary or Subsequent)	2,391	6,053	\$19,527,275	\$8,167

Note: Charge amounts for individual diagnoses cannot be summed due to double-counting. Patients with one BH diagnosis are highly likely to have another BH diagnosis, and both amounts are reflected in the table.

Source: MSRMC ED Dataset, 2013

Suicidal Ideation and Co-morbidities

This report does not specifically analyze costs associated with comorbidities or specific BH diagnoses. However, in the case of suicidal ideation (including suicide and self-injury), the presence of additional BH diagnoses is apparent and significant. The average patient with suicidal ideation has 1.4 additional BH comorbidities, 2.74 annual visits, and annual charges of \$9,256. In 2013, the estimated total ED charges for patients with suicidal ideation was \$2.72 million.

Table 54. MSRMC ED Charges for Patients with Suicidal Ideation and Co-Morbidities

BH Co-morbidities	Suicidal Patients	Total MSRMC ED Charges	MSRMC ED Charges Per Suicidal Patient
None	50	\$309,908	\$6,198
1	125	\$667,795	\$5,342
2	76	\$943,445	\$12,414
3	35	\$621,566	\$17,759
4 or more	8	\$178,626	\$22,328
Total	294	\$2,721,340	\$9,256

Source: MSRMC ED Dataset, 2013

High Utilizers

While patients with BH issues account for 14 percent of all ED patients, they represent 51 percent of ED patients with five or more visits (high utilizers) and 60 percent of super-utilizers, patients with 10 or more visits in a year. High utilizers have average annual charges per patient of \$22,400 compared to \$2,600 for a patient who only goes to the ED once.

Not only are these patients more expensive because of increased utilization, they also have increased cost per visit. High utilizers have an average cost per visit that is comparable to the average for all patients of \$2,700. However, patients with 10 visits or more have an average cost per visit of \$3,100. This increased cost per visit is largely due to the increased proportion of BH patients among high utilizers (see second table following).

Table 55. MSRMC ED High Utilizers, Visits, Patients, and Average ED Charge Amounts

	Number of MSRMC ED High Utilizer Patients	Number of MSRMC ED High Utilizer Visits	MSRMC ED Charges per Visit	MSRMC ED Charges per Patient	Total MSRMC ED Charges
5 visits per year	229	1,145	\$2,847	\$14,235	\$3,259,709
6-9 visits	265	1,826	\$3,017	\$20,790	\$5,509,479
10 visits or more	100	1,458	\$3,113	\$45,385	\$4,538,499

Source: MSRMC ED Dataset, 2013

The average charge per visit for BH patients is 25 percent greater than for non-BH patient regardless of the number of visits per patient.

Table 56. Average MSRMC ED Charges per Visit, BH and Non-BH

	MSRMC ED Charges of High Utilizers with BH Diagnosis	MSRMC ED Charges of High Utilizers with No BH Diagnosis
Less than 5 visits	\$3,163	\$2,580
High (5 visits)	\$3,324	\$2,490
Very High (6-9)	\$3,255	\$2,743
Super (10+)	\$3,373	\$2,500
All Visit Average	\$3,226	\$2,582

Source: MSRMC ED Dataset, 2013

Additional MSRMC ED Costs

Emergency Physicians

The preceding cost analysis for MSRMC ED is based on facility charge data. Since every patient is seen by a physician, visits also include physician charges. Physician charge data for all patients were unavailable. Medicare charge data reveals that the average MSRMC ED visit incurs \$575 in physician charges. For BH patients, this represents an estimated \$3.5 million per year in charges in addition to facility charges.

Unbillable Time (Patient Monitoring, Ex Parte Paperwork)

In addition to the charges discussed above, BH patients often require additional services that cannot be billed including:

- One-on-one observation for extended periods
- Removal of equipment and supplies from patient proximity
- Security and physical restraints
- Chasing patients who flee the ED
- Paperwork and coordination with law enforcement for involuntary commitments

Security Costs and Equipment Damage

BH patients, in contrast to other medical patients, pose a significantly greater threat of physical harm to themselves and others. In 2013, MSRMC ED visits involved at least 32 incidences of violent behavior, of which 22 explicitly required one-to-one guard coverage or involved the State Troopers. While men were more likely than women to be violent (25 of the 32 incidences involving violence), age is not a significant factor. These violent incidences are committed by patients of all ages, ranging from a 21-year-old man who punched a staff member in the jaw to a 75-year-old woman who kicked staff and an 83-year-old man who grabbed a physician by the throat. The financial impacts associated with patient violence are difficult to estimate. In 2013, these direct costs were reported to be just under \$5,000. However, the direct costs of medical bills and damaged equipment are only part of the cost. There is also an unmeasured impact on staff turnover and morale. In addition, every violent patient represents a risk of greater damage. In 2010, a patient destroyed \$25,000 worth of equipment in an examination room. In 2011, a different patient destroyed \$32,000 worth of equipment.

Impact on Other Patients

Another intangible but important cost of BH patients is their impact on other patients. BH patients' behaviors can amplify emotions in the already stressful ED environment. Additionally, BH-related conditions can impact non-BH use of the ED. For example, between 2008 and 2012, alcohol was a factor in 25 percent of vehicle fatalities.

Other Costs in the BH Emergency Response Spectrum

The MSRMC ED is the most costly component of the BH crisis response system. However, costs incurred by first responders to BH-related emergencies (law enforcement, ambulance, crisis line, and transport for patient transfers) also are not insignificant (National Highway Traffic Safety Commission, 2012).

Since first-responder costs associated specifically with BH emergencies are generally not available, the following analyses are based on estimated per-incident costs, coupled with data on the volume of emergency call responses by Palmer 911 Dispatch, Alaska State Troopers, and Mat-Su Borough Emergency Medical Services. The table below summarizes the number of response calls, estimated cost per response, and estimated total costs by first-response agencies involved in a BH emergency.

Emergency 911 Dispatch

There are two 911 dispatch centers in the Mat-Su Borough: Palmer Dispatch and MatCom (based in Wasilla). The two dispatches had a combined 2013 budget of \$3,648,387 and handled 24,268 calls in that year. This is an average full-allocation cost of \$148 per call. Cost data is not available specifically for BH-related calls or any other types of 911 calls; however, based on interviews with dispatchers, the characteristics of 911 calls do not vary significantly among types of 911 calls. Based on dispatch, EMS, and Alaska State Trooper data, an estimated 759 response calls were BH-related (including overdose, psychiatric abnormal behavior/suicide, DUI drugs and DUI alcohol) in 2013. Using the full-allocation value of \$148 per call, total 911 dispatch costs for BH-related calls was \$112,000. The following table shows estimates of the number and types of BH-related calls handled by individual response agencies.

Table 57. 911 Dispatch Estimated BH-related Call Responses, by Law Enforcement and EMS, 2013

Call Response Type	Law Enforcement Only	EMS Only	Law Enforcement and EMS	Total Call Responses
All Call Responses	17,328	5,625	1,675	24,628
BH-Related Call Responses	344	334	81	759
Overdose	0	63	35	98
Psychiatric Abnormal Behavior	0	141	0	141
Suicide, Attempted Suicide	0	130	30	160
DUI Alcohol or Drugs	344	0	16	360

Source: Palmer Dispatch, Alaska State Troopers, Mat-Su Borough EMS. Calculations by McDowell Group

Law Enforcement

There are three law enforcement agencies in the Mat-Su Borough: Alaska State Troopers, Wasilla Police, and Palmer Police. Based on Alaska State Trooper and Palmer Dispatch data, law enforcement responded to an estimated 425 BH-related emergencies in 2013 (344 responses alone plus 81 responses with EMS as shown in the table above). Data is not available on law enforcement costs specifically associated with BH-related call responses. Each BH-related incident is assumed to consume four hours of officer time. Using a fully loaded rate of \$136 per hour, BH-related emergencies are estimated to have a financial impact of approximately \$231,000.

It is important to recognize the wide range of time, effort, and costs associated with responding to BH-related calls. In some instances, costs can be very high. For example, in 2014, Alaska State Troopers searched for 36 hours for a person who was intentionally hiding. In addition to troopers' time, there were costs associated with the K-9 unit, coordination of Search & Rescue, and 12 hours of helicopter time (valued at \$36,000). The cost estimates here do not attempt to incorporate such relatively unusual incidents.

In addition to law enforcement costs associated with BH-related emergencies, there are also costs associated with transferring MSRMC ED patients to correctional facilities or API. More than half the patients transferred from MSRMC ED by law enforcement had BH diagnoses. Officer time to handle the transfer of 67 BH patients is estimated to total \$15,000 in 2013.

Emergency Medical Services

In 2013, the Mat-Su Borough Emergency Medical Services (EMS) responded to 7,257 calls, of which approximately 415, or just under 6 percent, were BH-related. The Mat-Su Borough EMS 2013 budget was \$5.9 million. To recover some of these costs, EMS charges for transportation of patients. Depending on the level of life support needed, charges range from \$675 to \$800 plus \$17 per mile. Using the standard response charge of \$675 and a weighted average of distances travelled, the average cost per BH-related call response is estimated to be \$900. Average distances from each ESN to MSRMC ED were estimated. The average mileage charge for each ESN was then calculated by multiplying the average distance by \$17 per mile. This would place EMS charges for BH-related call responses at approximately \$373,500.

Mat-Su Health Services

Mat-Su Health Services provides emergency consultative services in the MSRMC ED, other MSRMC wards, the Mat-Su detention center, and at their offices. In 2013, there were 329 emergency consults, of which 305 were in the MSRMC ED. The standard fee is \$160 per crisis intervention. In all, Mat-Su Health Services emergency-response services totaled approximately \$48,800.

Transferred Patient Transports

BH patients were more than twice as likely to be transferred to another care provider. This occurred in 5 percent of visits by BH patients compared with 2 percent of all ED visits. For BH patients, patient transport is performed by private contractors. The main contractor in Mat-Su is WEKA Transport. Based on ED discharge data, approximately 285 MSRMC ED BH patients were transferred to API and other hospitals. Using State Division of BH contract rates, which vary based on destination and other criteria, the estimated cost of transporting BH patients from MSRMC ED in 2013 was \$85,500 (\$300 per transfer).

Involuntary Hold for Mental Evaluation

In Alaska, a person can be legally detained against their will if they are deemed to pose a credible threat to themselves or others, including the inability to make rational decisions. This detention, known as an "ex parte" detention, is a 72-hour hold during which time a professional evaluation can be conducted to assess whether the person requires involuntary commitment to a psychiatric facility. Based on data provided by API, there were 198 involuntary holds of Mat-Su Borough residents in 2013. API charges a flat rate of \$1,288 per day. As these holds are for a three-day minimum, the estimated API charges are at least \$765,000. Part of the requirement for an involuntary hold is

approval from a magistrate. Based on discussions with the Palmer Court, the additional cost burden placed on magistrates is negligible.

Summary

The following table summarizes BH emergency-related costs other than those incurred at MSRMC ED. Based on the assumptions described above, these costs totaled approximately \$1.6 million in 2013. A per-incident rate cannot be determined due to the unknown duplication of incidents where more than one agency responded to a BH-related emergency call.

Table 58. Summary of Estimated Non-MSRMC ED BH Emergency Response System Costs, by Agency. 2013

	Number of Incidents	Estimated Cost Per Incident	Estimated Total Cost of BH Emergency Response
API Involuntary Commitment for Evaluation (of Mat-Su patients)	198	\$3,864	\$765,000
Mat-Su Borough EMS	415	\$900	\$373,500
Law Enforcement (Alaska State Trooper, City of Wasilla Police, City of Palmer Police)	425	\$544	\$246,000
911 Dispatch	759	\$148	\$112,000
Mat-Su Health Services	305	\$160	\$48,800
Transport of BH patients transferred from MSRMC ED	285	\$300	\$85,500
Total Cost			\$1,630,800

Sources: MSRMC ED Dataset, 2013; Interviews with 911 Dispatch, Mat-Su Borough EMS, Alaska State Troopers, City of Palmer Police Department, Mat-Su Health Services, DBH, and WEKA; Estimates by McDowell Group

MSRMC ED Hot-Spot Analysis

With funding from the Robert Wood Johnson Foundation, the Camden Coalition of Healthcare Providers developed a model to identify high-utilizer patients, enable better coordinated care, and prevent expensive over-use of the ED for preventable conditions or untreated chronic conditions. In 2002, the Coalition started to collect data from public and private insurance claims to identify patients who use the most expensive services and map where they live. This analysis is termed "hotspotting." According to the Robert Wood Johnson Foundation, implementation of the hot-spot model achieved the following:

- Care coordination reduced the overall cost of care for patients with complex, chronic conditions.
- Hot-spotting improved the health of certain populations by showing where and how to apply
 proven public-health services or programs to improve the quality of existing services, thereby
 reducing overall health and ED costs.
- High utilizers' social needs were addressed in addition to their health needs, including meal delivery, accessible housing, transportation, and follow-up care (Robert Wood Johnson Foundation, 2012)

Applying this model to the Mat-Su Borough requires analysis of service delivery and socio-economic conditions combined with mapping the concentrations of BH patients (including high utilizers and their associated costs).

High Utilizers

The map below shows which census tracts are home to the highest concentrations of BH patients who accessed the MSRMC ED in 2013 (darkest shade of gray). The highest count of BH patients originate from three tracts: Census Tract 12.02 (Palmer), Census Tract 6.04 (Wasilla), and Census Tract 8 (Knik Arm). Together, MSRMC ED BH patients living in these three census tracts represent a third of all MSRMC ED BH patients.

Layered on top of this map is a hot-spot of MSRMC ED use by BH patients (dark red). The hot-spot is generated by a statistical tool used to determine the highest concentration of BH patients (based on their spatial relationship at the ZIP code + 4 digit level) and their frequency of ED use. The distinct hot-spot is centered on Wasilla.

Below the map is a table showing selected socioeconomic indicators for each of three census tracts with the highest counts of BH patients.

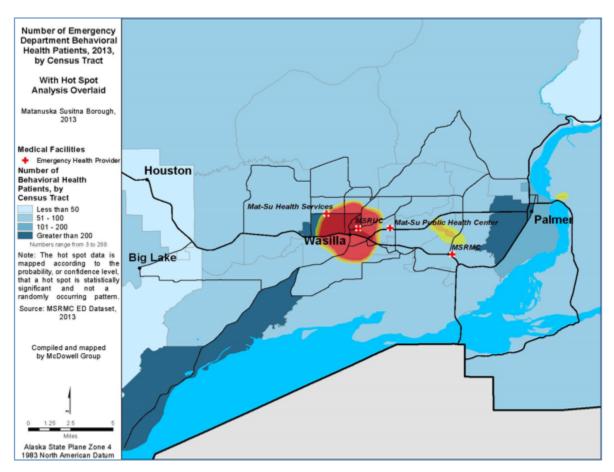


Figure 17. MSRMC ED BH Patients, by Census Tract, and Hot-Spot of High Utilizers, 2013

Table 59. Socioeconomic Profiles of Selected Wasilla, Palmer, and Knik Arm Census Tracts with Highest Counts of MSRMC BH Patients

	Knik Arm (CT 6.04)	North Wasilla (CT 8)	Greater Palmer (CT 12.02)	Mat-Su Borough (all CTs)
Number of MSRMC BH Patients	288	261	223	2,391
Population	3,486 ¹	4,534	4,726	93,074
Population Density, per square mile	14	978	648	4
% Population older than 65	8%	9%	6%	9%
% Population below Poverty Level	13%	12%	8%	10%
% Households receiving Food Stamps/SNAP	15%	17%	11%	9%
% Households receiving Public Income Assistance	6%	10%	10%	9%
% Population 18+ with High School Diploma	87%	89%	94%	92%
% Population 25+ with Bachelor's Degree	23%	19%	30%	15%
% Population 25+ with Professional/Grad. Degree	7%	5%	9%	7%
% Unemployed Population 16+	12%	8%	6%	11%

Source: 2008-2012 5-Year American Community Survey

¹ This population estimate does not include inmates of Goose Bay Correctional Facility.

BH Patients on Medicaid

The map below shows which census tracts have the highest count of BH patients on Medicaid who accessed the MSRMC ED in 2013 (darkest shade of green). The highest counts of BH patients on Medicaid came from the three same census tracts as above. In this case, the dataset was not large enough or the patients too spatially dispersed for the statistical tool to generate a hot-spot analysis.

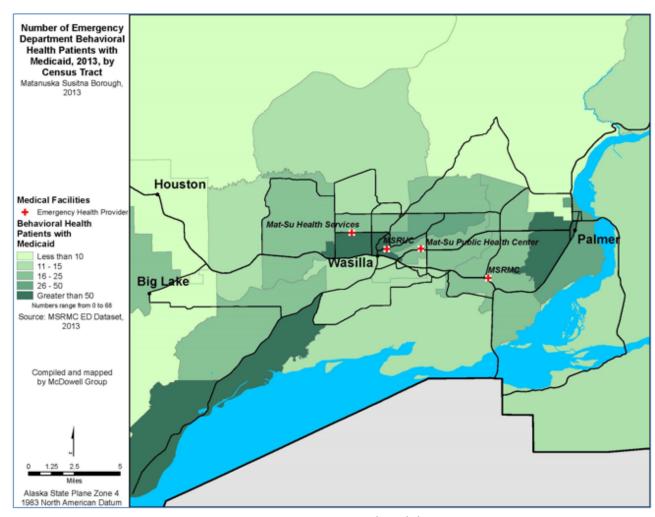


Figure 18. MSRMC ED BH Patients on Medicaid, by Census Tract, 2013

BH-related MSRMC ED Charges

The map below shows which census tracts have the highest MSRMC ED charges associated with discharged BH patients (does not include BH patients who were admitted to MSRMC directly from the ED) in 2013 (darkest shade of purple). The highest charges are found in the same three census tracts with the highest number of BH patients. Together, these three census tracts represent 38 percent of BH-discharged-patient MSRMC ED charges. The map shows a hot-spot of ED charges (dark red) generated by a statistical tool that determines the highest concentration of BH charges (based on the spatial relationship at the ZIP code + 4 digit level). As with the high-utilizer hot-spot, the hot-spot for charges is also centered on Wasilla; however, there are also "warm spots" located in the area near MSRMC.

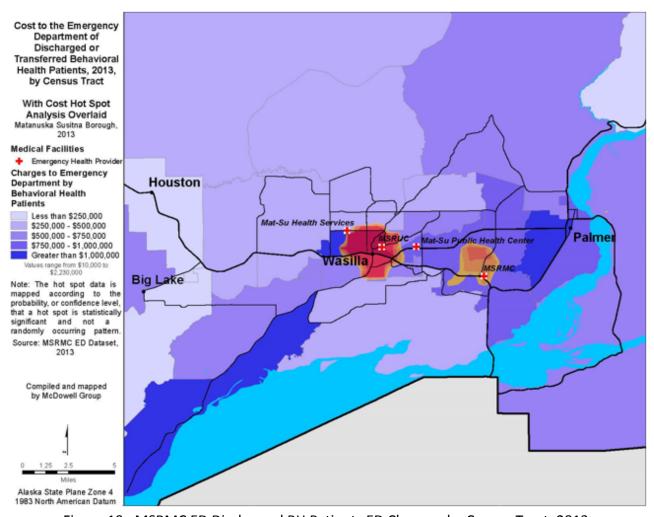


Figure 19. MSRMC ED Discharged BH Patients ED Charges, by Census Tract, 2013

Medicaid Charges for BH Patients

The map below shows which census tracts account for the highest charge totals for BH patients on Medicaid who accessed the MSRMC ED in 2013 (darkest shade of pink). Two census tracts (Central Wasilla and Knik Arm) have the highest total charges in Mat-Su. The dataset was not large enough and/or the costs (per patient) were too spatially dispersed to generate a statistical hot-spot analysis.

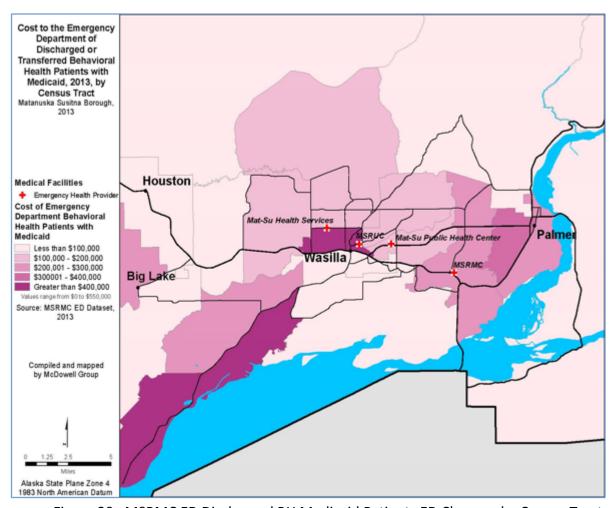


Figure 20. MSRMC ED Discharged BH Medicaid Patients ED Charges, by Census Tract

Table 60. Overview of MSRMC ED Medicaid BH Patients Who Were Discharged or Transferred (not admitted) by Census Tract, 2013

	<u> </u>	· ·	·	
Census Tract	Knik Arm (CT 6.04)	Central Wasilla (CT 8)	Greater Palmer (CT 12.02)	MSB Total (All CTs)
Percent of All ED BH Patients	87%	88%	85%	86%
# Patients	251	198	221	1,780
# Visits per Patient	1.99	3.36	2.34	2.45
# Patients with Medicaid	68	62	53	483
# Visits per Medicaid Patient	2.46	3.65	2.23	2.78
Total Charges	\$1,637,116	\$2,279,792	\$1,669,133	\$14,632,194
Charges per Patient	\$6,522	\$11,514	\$7,553	\$8,220
Charges per Visit	\$3,274	\$3,428	\$3,222	\$3,351
Charges per Medicaid Patient	\$7,633	\$9,052	\$6,458	\$7,929
Charges per Medicaid Patient Visit	\$3,108	\$2,483	\$2,900	\$2,856

Note: Patients not matched to a ZIP code are not included in these numbers.

Source: MSR UC Dataset, 2013

Challenges and Recommendations

This analysis revealed a system for responding to BH crises that is not meeting the needs of Mat-Su residents. The two contractor groups who contributed to this report, McDowell Group and WICHE, each provided "best practice" recommendations to further establish a working continuum of care focused on crisis prevention and treatment. A combination of these recommendations is found below.

Planning

1. Challenge: There is a lack of statewide and regional planning and prioritizing service needs. The gap analysis and the number of patients with BH primary diagnoses that use the MSRMC ED demonstrate that there is an inadequate continuum of care for Mat-Su residents in BH crisis. This is due to two main reasons: lack of a comprehensive system of statewide and regional planning, and prioritizing service needs and inadequate funding of BH services in Mat-Su to meet the needs of the continuously growing population. DBH does not conduct its own service gap analysis but instead relies on the CBHTR grant application process, which includes provider submission of a Community Action Plan (CAP) to identify service gaps. A review of the CAP instructions indicates a requirement that providers meet to develop the CAP, and that "Community stakeholder organizations (such as the Office of Children's Services, Department of Juvenile Justice, Division of Public Health, Division of Vocational Rehabilitation, Division of Senior and Disabilities Services, domestic violence prevention, schools, law enforcement, regional housing authorities, and others) should be invited to attend on a regular basis or at least teleconferenced into the meeting when their participation is relevant." A fully developed CAP that assesses the needs of the community and existing services requires more extensive resources, time, and expertise than are available in this type of community coalition.

Recommendation 1: Increase DBH's role in prioritizing service needs. DBH's website states the division's policy regarding service provision: "The central purpose of the Division is to provide a continuum of statewide behavioral health (mental health and substance use) services ranging from prevention, screening, and brief intervention to acute psychiatric care. Included are services for the general population (prevention and brief intervention), individuals experiencing emotional disturbance and emergency/crisis, seriously mentally ill adults, seriously emotionally disturbed youth, and substance use disorder services for youth and adults." Given limited funding availability and the need to prioritize resources, DBH should consider a broader review and prioritization of BH service needs on a regional or community basis. This report, along with the results of the Trust's Alaska BH Systems Assessment Analysis Plan, would help inform the prioritization of BH needs and perhaps a shift in the policies used to guide prioritization of CBHTR Grant funds.

2. Challenge: The number of MSRMC ED high utilizers suggests emergency response services are not well-coordinated or effectively integrated into the larger continuum of BH care system from prevention to treatment programs.

Recommendation 2: Develop a BH Continuing Care Network of community-based providers that addresses:

- Acute, intensive services, including ED, inpatient and crisis stabilization
- Intensive Outpatient
- Community Support

A network would help address several issues, including:

- Support initiatives that reduce patient costs of care and improve patient outcomes.
- Oversee development and implementation of integrated processes and procedures among participating entities.
- Jointly monitor key metrics related to BH outcomes and quality measures.
- Develop clinical- and patient-care pathways and supportive processes, tools, and systems to implement the pathways.
- Consider health information technology and e-records to collect and share data (particularly for high utilizers).

The network should develop communication plans (internal and external) and consistent messaging for multiple audiences and systems to promote best practices.

Funding and Services

3. Challenge: There is a lack of funding for a comprehensive system of prevention and treatment for BH crises. Research has shown that funding BH crisis services can save money. A recent study published by SAMHSA discusses the significant cost savings that can result from crisis services, due to reduced inpatient utilization, ED diversion, and more appropriate use of community-based BH services. Additionally, a study by Wilder Research (2013) used claims data to calculate a return on investment of mental health crisis stabilization programs in the east metropolitan area of the Minnesota Twin Cities. The study found that the net benefit for mental health crisis stabilization services was approximately \$0.3 million, with a return of \$2.16 dollars for every dollar invested. Additional funding is needed to provide increased BH crisis services to Mat Su residents and residents throughout Alaska. Specifically, Mat Su would benefit from a hospital that could serve as a DET facility for individuals requiring an involuntary commitment due to a BH crisis.

Recommendations 3:

- a) Alaska should maximize available federal funding by fully participating in the federal/state program to provide funding to hospitals that treat a high number of uninsured individuals through the DSH funding mechanism. By federal law, states are allowed to provide these funds to eligible hospitals to offset broader uncompensated care costs. However, there have not been Alaska state funds available to match the federal allotment (at 50%). The FY13 unused DSH allotment was \$10.5 million. If this amount had been matched by state funds, the available additional DSH funding would have been \$21.1 million.
- b) DBH should increase funding for Mat-Su crisis response services and consider a model to optimize funding, as well as adequately plan and prioritize services regionally, such as a non-profit Regional BH Authority. An integrated approach to providing and funding services is essential to address BH crises, reduce the likelihood of future emergencies, and

provide positive outcomes for those in need. Collaborative strategies allow states and regions to use resources effectively by maximizing funds and staffing, providing service to as many individuals as possible, and filling service gaps. Perhaps most importantly, coordinated funding approaches ensure that services are driven by needs rather than by funding. Collaborative funding also promotes coordination of care among multiple agencies, and duplicative services are easier to identify and eliminate.

4. Challenge: The gap analysis demonstrated that several type of crisis prevention and treatment services are not readily available to Mat-Su residents. Additionally, there are virtually no services that focus on addressing the needs of residents in crisis early on to prevent the escalation of the crisis.

Recommendation 4: Establish the following services recommended in the SAMHSA proposed *Good and Modern Addictions and Mental Health Service System Model* in the Mat-Su Borough.

- a) Develop a single Crisis Hotline and Warm Line. A robust, single crisis hotline and warm line should be developed for use in Mat Su. The hotline and warm line should meet the crisis organization and staff accreditation standards set by the American Association of Suicidology. Many states have gone to a state-wide telephonic crisis hotline and warm line. One call system is more efficient and can be more effective at monitoring and supporting repeat callers. Warm line services should be provided by trained peer specialists. Additionally, building community awareness of a single hotline and warm line (rather than having multiple lines available in a community) will concentrate resources, reduce any confusion on what numbers to call, and be easier to advertise to a local, regional, and statewide market.
- b) Develop mobile services that provide urgent BH care and have the capacity to go out into the community to begin the process of assessment and definitive treatment outside a hospital or health care facility. This service is available 12 to 16 hours a day, especially in the evening hours and on weekends. Individuals would have access to the full continuum of care and have a psychiatrist available by phone or for in-person assessment as needed and clinically indicated. There should be access to licensed independent mental health practitioners (LIMHP) who are trained in the assessment and management of crisis phone calls and who are able to assess the priority of the call and provide interventions that are appropriate to the level of acuity of the caller at all times that the service is available. When the service is not available, phones should be answered by a service that is able to connect callers with emergency personnel. Ideally, this phone service would either be or be closely linked to the crisis hotline.

Urgent care services do not substitute for a means of delivering emergency psychiatric care, but they are able to provide same-day treatment in order to prevent individuals at risk from developing BH emergency conditions. In areas that are not densely populated, they may be the ideal way of delivering high quality BH emergency care and in all settings provide a means to deliver emergent (within one hour), urgent (within eight hours), or routine (within 24 hours) treatment to prevent decompensation of individuals at risk for developing BH emergency conditions.

- c) Develop a 12- to 16-bed Crisis Stabilization and Respite Center with detox capacity. Given the population growth of the Mat-Su Borough and relatively high use of existing BH crisis services, the region could support a 12- to 16-bed crisis stabilization and respite program with detox capacity. This program could help divert individuals with substance-related disorders from being inappropriately admitted to the API. [Note: More than 16 beds would prohibit Medicaid reimbursement for adults receiving these services due to the Centers for Medicare and Medicaid Services Institution for Mental Disease Exclusion. The crisis stabilization and detox program should be closely aligned with MSRMC for medical clearances. Given the 242 individuals who received care at API in 2013 with an average length of stay of 11 days, this is 2,662 bed days occupying seven beds throughout a year. An additional 244 individuals were served by the PPED, while others spent days at the MSRMC ED waiting for a bed at API. The Providence Crisis Recovery Center, Mental Health Unit, and Discovery Unit serve as additional resources for Mat-Su; however, access to and availability of beds at these facilities present challenges. Further, API staff have stated that they have difficulty placing patients from Mat-Su who are not ready to go home but who need more transitional housing to "step-down" from API. Mat-Su Pretrial is another current part of the crisis services continuum; however, it serves individuals remanded for a crime and/or intoxicated individuals held under a Title 47 hold. Given the known demand for crisis services and the current lack of availability of services, a crisis stabilization and respite center serving adolescents and adults, with both mental health and substance-related disorders with detox capacity would greatly benefit the community and remove the pressure on capacity of both Mat-Su and Anchorage area providers.
- d) Develop an Urgent Care BH Walk-In Clinic located within the "hotspot" of high utilizers in Wasilla to enhance outpatient care, particularly aimed at high utilizers. The mapping analysis of where high utilizers live and their ED costs indicates central Wasilla is the geographic hotspot within the Mat-Su Borough. When considering priorities of where services should be located, central Wasilla is the highest priority location for community services to assist high utilizers to address their BH and social needs. West Palmer and Knik Arm areas are the second and third priority for services. Experience with these types of ambulatory clinics located in or near the ED has shown dramatic decreases in high-utilizer ED visits and decreased hospitalizations (Services, 2014).
- e) Target high utilizers for case management services. Implement a high-utilizer intervention program providing community-based, integrated intensive case management services. Initially target individuals who are high utilizers of ED and other emergency services such as API. These targeted intensive programs require an organized collaborative effort across agencies; however, they provide significant opportunities for improved outcomes.
- f) Develop involuntary outpatient commitment and voluntary civil commitment services. Alaska statute allows involuntary outpatient care for committed persons. An individual may be released before the expiration of the commitment period if a provider of outpatient care accepts the individual for specified outpatient treatment for a period of time not to exceed the duration of the commitment. If the provider of outpatient care determines that the individual will require continued outpatient care after the expiration of the commitment period, the provider may initiate further commitment proceedings.

Involuntary outpatient commitment, or Assisted Outpatient Treatment (AOT), represents an evidence-based mechanism for supporting recovery, fostering stability, and avoiding the consequences of receiving no treatment at all. Multiple studies have conclusively established its potential to significantly reduce a number of negative outcomes — including hospitalization, incarceration, suicide, violence, and crime — among the hardest-to-treat people with severe mental illness, and save money in the process. In 2011, the US Department of Justice, Office of Justice Programs certified AOT as an effective, "evidence-based" approach to reducing crime and violence.

5. Challenge: According to Mat-Su EMS staff, there has been an increase in the number of psychiatric emergency diversion from the MSRMC to Anchorage, including to the PPED which is part of the Providence Alaska Medical Center ED. In addition to delaying treatment for serious psychiatric emergencies, diversions into Anchorage take an EMS vehicle out of the region for what can be a significant period of time, leaving Mat-Su residents with reduced access to emergency services. PPED only has six beds, and, like the MSRMC, it often is full. When that occurs, PPED cannot divert; instead, its BH clients end up taking a bed in the Providence Alaska Medical Center ED, so that patients with BH needs end up filling medical ED beds. When API is full and not accepting patients for a period of time, then PPED patients remain in ED beds for hours, with the result that fairly frequently these patients exceed the 23 hours of a normal outpatient ED visit.

Recommendation 5: As an interim step, until a 12- to 16-bed crisis stabilization and respite center can be funded and open in Mat-Su, the development of 4 to 6 dedicated psychiatric emergency evaluation and stabilization (DES) or treatment (DET) beds should be considered. Similar beds are currently located in Bethel and Ketchikan (DES), and Juneau and Fairbanks (DET). According to MSRMC Management, because MSRMC is a physician-syndicated hospital and also because of the ACA regulations, there are restrictions that prevent expansion of the number of beds in the hospital; however, these restrictions may be lifted in 2017 when the physician syndication is dissolved. If a 12-16 bed stabilization unit does not exist in Mat-Su in 2017 and is not in the process of being developed and the ACA restriction no longer applies, MSRMC should consider adding 4-6 psychiatric beds.

Advantages of DET designation include relieving admission pressure on API, as DET facilities may keep an individual for up to 40 days, while a DES facility may only keep someone for seven to ten days. A DES or DET unit would require approval from DBH, and would need to meet several requirements as detailed in the Alaska Administrative Code, including employment of a full-time psychiatrist and other appropriate clinical staff. These administrative requirements are similar to the requirements for an acute hospital.

6. Challenge: MSRMC is not currently designed to fully meet the needs of patients with BH needs. Currently, MSRMC has no on-staff psychiatrist. Emergency room physicians and other medical providers are limited in their BH expertise and could use additional support to assess patient needs and develop intervention and discharge plans.

Recommendation 6: As an interim step until Recommendations 4c or 5 are completed, the BH capacity of the MSRMC ED should be developed with additional on-site BH professionals funded by DBH. A 2013 PES funding proposal submitted by MSHS suggested a staffing level of 2 FTE BH clinicians supported by 2 FTE case management staff would be available in the ED during high volume periods 24 days, 365 days per year. This level of staffing should be explored. Additionally, psychiatric consult should be available for MSRMC ED patients and inpatients with BH diagnoses. Options for providing access to a consulting psychiatrist could include tele-psychiatry, which would enable assessments and interventions delivered by highly specialized, interdisciplinary BH teams with psychiatrist support. Professionals who participate in the tele-psychiatry program must be credentialed at MSRMC and licensed in Alaska. One option is agreement with API to provide tele-psychiatry services to MSRMC. This form of consultation would also help determine whether patients are eligible for placement at API.

7. Challenge: A February 2014 report from the American Mental Health Counselors Association indicates uninsured individuals with mental illness consistently forgo needed preventive and routine care. This behavior results in clinical deterioration to the point that individuals find themselves in crisis and need access to acute and expensive health and mental health emergency and inpatient care, currently funded by state budgets. Even when an organization provides services to individuals who are indigent they are often not free, but the cost is based on a sliding fee scale. Additionally, the services that are provided are not always comprehensive but may be scaled down compared to the services available to those with coverage. Having to choose between spending money on food/housing or paying for a counseling appointment may serve as a deterrent to seeking and receiving services that could prevent a BH crisis. Using the State's NSDUH prevalence estimates and coverage gap estimates down to the regional Mat-Su level, there are approximately 2,150 poverty-level childless and uninsured adults in Mat-Su with either any mental illness (AMI), SMI, or SUD. Of the 2,150 individuals, 419 have AMI, 88 have a SMI, and 202 have a SUD. (These figures do not control for population characteristics, such as race, age, and gender).

Recommendation 7: The State of Alaska should participate in the Medicaid Expansion Option under the Affordable Care Act (ACA). A report from the American Mental Health Counselors Association estimates that of the entire Medicaid-eligible expansion population in Alaska, 38 percent (or 25,000) of Alaskans with a substance-related disorder, serious mental illness, or serious psychological distress would be eligible for Medicaid if Alaska opted in to Medicaid expansion under the ACA. The ACA provides important incentives for states to expand their Medicaid programs to cover all the safety net population, including generous federal matching funds that begin at 100 percent in 2014 and gradually are reduced to 90 percent in 2020, far above the traditional federal Medicaid match levels.

Training and Best Practices - Statewide

8. Challenge: MSRMC has a large number of high utilizers who use a high percentage of ED capacity.

Recommendation 8: Work with other Alaskan hospitals to promote the adoption of best practices to reduce unnecessary ED visits, such as those adopted by a coalition of health care providers in Washington State. In Washington, as in other states, patients visit the hospital ED for conditions that may be more effectively treated in an alternative, more appropriate setting that may be less costly. Washington state legislation enacted in 2012 provides best practices aimed at reducing unnecessary emergency department use by Medicaid clients. All Washington hospitals with emergency departments serving Medicaid clients attested to their agreement to these practices on or before July 1, 2012. Consider similar provisions endorsed by the coalition, including:

- (a) Adoption of a system to exchange patient information electronically among emergency departments. In order to reduce unnecessary use of the ED, hospitals need to be able to identify frequent users and share information regarding their care. Previously, the ED physician had no way of knowing, for example, that a patient had visited multiple EDs in the past week with the same complaint. The electronic information system allows ED physicians to see all the patient's ED visits from all hospitals over the past twelve months, and to know the diagnosis and treatment given on these previous visits. If a patient is seeking narcotics or has a chronic condition, the ED physician will know this and will respond accordingly.
- (b) Adoption of a system to educate patients that the ED should be used only for true emergencies. Every hospital has now agreed to provide patients with a brochure and/or discharge instructions discussing the most appropriate setting for their health care. Hospitals have also attested that they have trained ED physicians in how to talk to patients about where they should receive care for non-emergent needs.
- (c) Implementation of a process to disseminate lists of frequent users to hospital personnel to ensure they can be identified by the electronic information exchange system discussed above.
- (d) Implementation of processes to assist frequent users with their care plans and to make appointments for these patients to see their primary care provider within 72-96 hours of their emergency room visit.
- (e) Adoption of strict guidelines for the prescribing of narcotics. Hospitals have also attested they have trained ED physicians how to enforce these guidelines.
- (f) Enrollment of at least 75 percent of ED prescribers in the state's Prescription Monitoring Program (PMP) by July 1, with a goal of 90 percent enrollment by December 31, 2012. The PMP is an electronic online database used to collect data on patients who are prescribed controlled substances. It enables prescribers to see which prescriptions have

- been previously filled by a patient. This is essential information to reduce the number of patients seeking narcotics.
- (g) Designation of hospital personnel to review feedback reports regarding ED utilization and to take appropriate action in response to the information provided by those reports.

A preliminary report in January 2013 tentatively identified favorable utilization and cost trends, but there was insufficient data to draw any definitive conclusions. This report, *Emergency Department Utilization: Update on Assumed Savings from Best Practices Implementation*, re-examines Medicaid utilization data to identify the costs and trends of ED visits. Savings were achieved through reductions to the Health Care Authority budget, with an estimated annual savings for state FY2013 of \$33,650,000. The savings from managed care health plans were built directly into the premiums from the preliminary assumption of savings identified in the 2012 legislation. The total savings cannot be definitively attributed to the initiative and may be related to other factors. However, data also indicates a reduction in ED utilization and the rate of ED-related scheduled drug prescribing since the implementation of the initiative.

Training and Best Practices - Local

- 9. Challenge: A significant portion of the first responder (EMS and law enforcement) response calls are BH-related. Of those calls, 36 percent of all BH calls responded to by EMS personnel were related to suicide or attempted suicide and DUI represented 42 percent of all Alaska State Trooper BH-related response calls.
 - Recommendation 9: It is recommended that Crisis Intervention Team (CIT) training be mandatory for a minimum number of law enforcement (including city police and Alaska State Troopers) and other emergency responders (EMS) coming into contact with individuals experiencing a BH crisis. Additional funding would be needed to cover costs of supporting services while officers are receiving training. CIT training has been recognized as a best-practice model by multiple organizations, including the National Alliance on Mental Illness, American Association of Suicidology, and US Department of Health and Human Services (SAMHSA). The training helps reduce the stigma of BH conditions, improves the safety of first responders, reduces unnecessary interaction with the criminal justice system, and provides an opportunity to find solutions to BH-related emergency response in the community.
- 10. Challenge: Many of the individuals currently involved in providing crisis response services in Mat-Su, including ED and other MSRMC staff and first responders, have not been trained in providing Trauma-Informed Care. Trauma-Informed Care (TIC) is a treatment framework that involves understanding, recognizing, and responding to the effects of all types of trauma. The approach emphasizes physical, psychological, and emotional safety for patients and staff and helps to rebuild a sense of control and empowerment for the patient.

Additionally, reducing the stigma associated with mental illness may be a critical step in prevention and early intervention for mental disorders and may improve the quality of life of individuals with mental illness. Consistent with this goal, MSRMC could consider the addition of peer specialist position(s) located in the ED to assist both patients and ED staff to improve the

efficiency and effectiveness of treatment and disposition of patient needs. A peer specialist is a person in recovery from a mental illness who has specific knowledge through lived experience and competence to assist another person in recovery from mental illness.

Recommendation 10:

- a) MSRMC staff and Mat-Su first responders should receive Trauma-Informed Care Training. The National Center for Trauma-Informed Care (NCTIC) is a resource for TIC. This type of training can also have the added benefit of reducing stigma and its effects on people dealing with BH issues.
- b) MSRMC should consider the addition of peer specialist position(s) located in the ED. The use of peer specialists as part of the treatment team, for example, has been shown to have favorable results. When peers are part of hospital-based care, the results indicate shortened lengths of stays, decreased frequency of admissions, and a subsequent reduction in overall treatment costs.
- 11. Challenge: Analysis of BH high utilizers reveals a substantial number of high-cost frequent use and "bounce backs" usage of the ED. High utilizers are expensive to the system, both in financial terms and because they consume ED capacity. This suggests there is a lack of knowledge of other lower-cost (and often more appropriate) treatment options and follow-up that could result in more sustainable and appropriate treatment plans. Follow-up issues may result from lack of coordinated services; ineffective screening tools; limited local treatment options; and poor communication among the ED, crisis BH workers, primary care providers, and patients.

Recommendation 11: Adopt practices to address high utilization and bounce back of patients with BH needs in the ED thereby improving quality of care, reducing costs by increasing continuity and care coordination, and redirecting patients with BH non-emergent care needs to primary-care providers or community-based programs. This may include:

- a) Assessment of the effectiveness of ED discharge processes to promote seamless transitions between the ED and home settings, including follow-up procedures to ensure continuity of BH care and patient commitment to the discharge plan.
- b) Examination of current screening and assessment processes to ensure early identification of BH needs in the ED, provide mapped interventions for placement and care management, and offer standardized, longitudinal tracking of health status throughout the continuum of care. Currently, the MSRMC uses a screening tool that is built by Medhost and embedded in the electronic medical record. Assessment of this tool is recommended to ensure it meets the current best practices for BH screening. Screening results need to be communicated to providers and nursing staff for all ED patients with BH needs. The Appendices section of this report provides a selection of screening tools that could be considered.
- 12. Challenge: Currently, MSHS is the only community mental health clinic in Mat-Su. The clinic provides crisis services to the general public through their outpatient services, crisis line and in the MSRMC ED. However, many providers and referrers are not aware of the full scope of

MHSH's services and the full potential use of the clinicians in the ED may be limited due to a combination of MSHS resources stretched too thin and difficulties in recruiting and retaining trained personnel.

Recommendation 12: Expert consultation should be provided to existing Mat-Su BH crisis services to examine and advise on best practices for clinical and business aspects of providing crisis care and how to best promote and make MSHS services widely available to Mat-Su residents who are experiencing a crisis.

13. Challenge: Mat-Su has a very high rate of suicide and suicide attempts/ideation-related visits in the ED.

Recommendation 13: Community medical providers should have access to toolkits to identify the critical needs of suicidal patients. For example, one toolkit developed by WICHE in partnership with Suicide Prevention Resource Center has been shown to improve suicide detection and intervention skills of primary care providers.

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APPENDIX A: Expanded Demographic Description of Mat-Su

Educational Attainment

A high school diploma is one of the best indicators for positive health outcomes and success throughout a person's lifespan. Individuals with postsecondary education have even better health outcomes. Nine of 10 Mat-Su adults aged 25 and older have achieved a high school education or higher.

Table 61. Palmer, Wasilla, Mat-Su Borough, Alaska, and U.S. Educational Attainment, Percent

Education Level	Palmer	Wasilla	Mat-Su	Alaska	US
High School					
High School Cohort Graduation Rate ¹	-	-	73.5	71.8	-
% High School Degree or Higher Population Age 25+2	91.5	92.2	92.3	91.6	85.7
% Less than High School Degree Population Age 25+2	1.4	1.7	7.7	3.1	6.0
Postsecondary Education					
% Some College Population Age 25+2	32.3	32.3	30.9	29.1	21.3
% Associate's Degree Population Age 25+ ²	7.9	8.5	8.9	7.9	7.7
% Bachelor's Degree or Higher Population Age 25+2	22.4	20.6	21.2	27.5	28.5
% Bachelor's Degree Population Age 25+2	15.9	14.7	14.6	17.8	17.9
% Graduate/Professional Degree Population Age 25+2	6.4	5.9	6.6	9.7	10.6

¹ ADEED, 2012-2013 Cohort.

² American Community Survey (ACS), 5-Year Data 2008-2012.

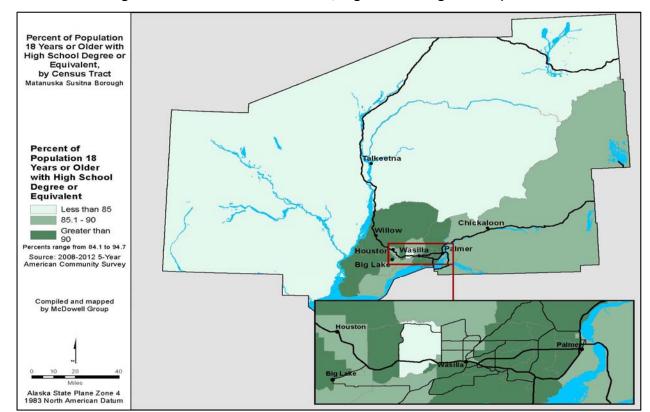


Figure 21. Educational Attainment, High School Degree or Equivalent

Housing Characteristics

In 2010, there were 41,329 housing units in the Mat-Su Borough (U.S. Census). Of the 31,824 occupied housing units, 76 percent were owner-occupied, and 24 percent were renter-occupied units. According to the ACS 2008-2012 Five-Year Average, 1,351 households lacked complete plumbing facilities.

Economic Data

Lower income levels are associated with poor health outcomes. Approximately one out of 10 Mat-Su residents lived in poverty in the past 12 months. Nearly seven percent of Borough families live below the poverty line. Mat-Su per capita income was lower than Alaska but slightly higher than U.S. per capita income for the 2008-2012 ACS Five-Year Average. Mat-Su per capita income increased from \$26,600 in 2000 to \$29,465 in 2008-2012 ACS Five-Year Average. One in four Mat-Su children is eligible for free lunch, an additional economic indicator. According to the ACS 2006-2008 Three-Year Average, 9.2 percent of Mat-Su Borough households received cash public assistance or food stamps. This is more than the Alaska and United States averages.

Economic inequality affects the health of a community. The Gini coefficient of household income inequality is a measure of how disparate incomes are within a community. The Mat-Su Gini coefficient is 0.3955, lower than Alaska and the U.S., which indicates a more homogeneous distribution of wealth within the community.

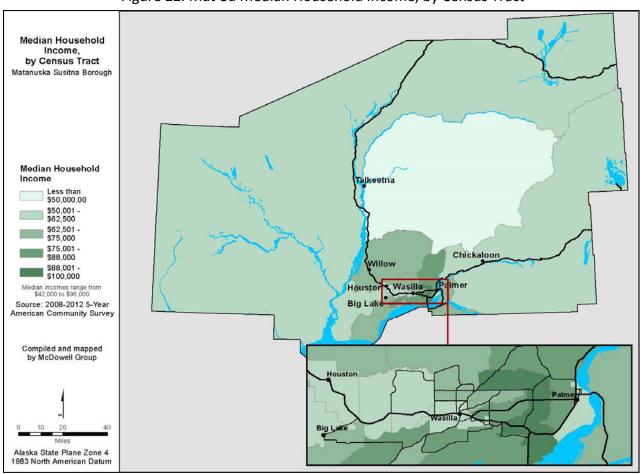
Table 62. Mat-Su Household Income and Poverty Status, 5-Year Average (2008-2012)

Indicator	Mat-Su	Alaska	U.S.
Income Inequality Gini Coefficient ¹	0.3955	0.4132	0.4712
Median Household Income ¹	\$70,728	\$69,917	\$53,046
Per Capita Income ¹	\$29,465	\$32,537	\$28,051
Poverty Level (Total Population) ¹	9.9%	9.6%	14.9%
Poverty Level (Families) ¹	6.9%	6.6%	10.9%
Poverty Level (Under 18 Years) ¹	13.2%	13.0%	20.8%
Free Lunch Eligible ²	24.5%	31.5%	39.9%
Households with Cash Public Assistance or Food Stamps ³	9.2%	7.9%	8.1%

¹ American Community Survey, 5-Year Estimates 2008-2012 Data. The Gini Coefficient compares the actual distribution to a perfectly equal distribution as a ratio of areas. The Gini Coefficient range is 0 (perfect equality) to 1 (a single individual accounts for all consumption).

Note: The poverty threshold differs by household size.

Figure 22. Mat-Su Median Household Income, by Census Tract



² Economic Research Service (ERS), U.S. Department of Agriculture (USDA), 2009 Data.

³ American Community Survey, 3-Year Estimates 2006-2008 Data.

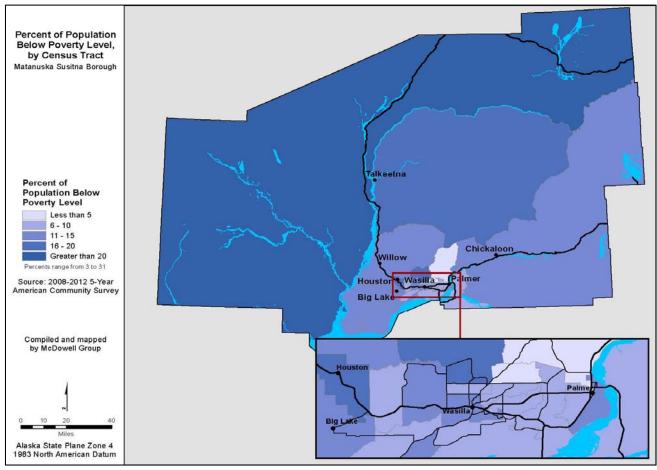


Figure 23. Percent of Mat-Su Population below Poverty Level, by Census Tract

Unemployment in the Mat-Su Borough ran just slightly higher than the national average during May 2014, 6.4 percent compared to 6.3 percent.

Table 63. Employment Status, Personal Income, and Wages

	Mat-Su Borough
2013 annual average unemployment rate ¹	7.3%
May 2014 unemployment rate ¹	6.4%
2008-2012 Average, % of 16+ population not employed ²	10.5%
2012 Total personal income (in \$thousands) ³	\$4,257,875
2013 Total earnings ¹	\$831,866,973
2013 Average monthly wage	\$3,239
2013 Average monthly wage and salary employment ¹	21,400
2013 Peak monthly wage and salary employment ¹	22,580

¹ Alaska Department of Labor and Workforce Development (ADOLWD).

² American Community Survey (ACS) 2008-2012 ACS average.

³ Bureau of Economic Analysis.

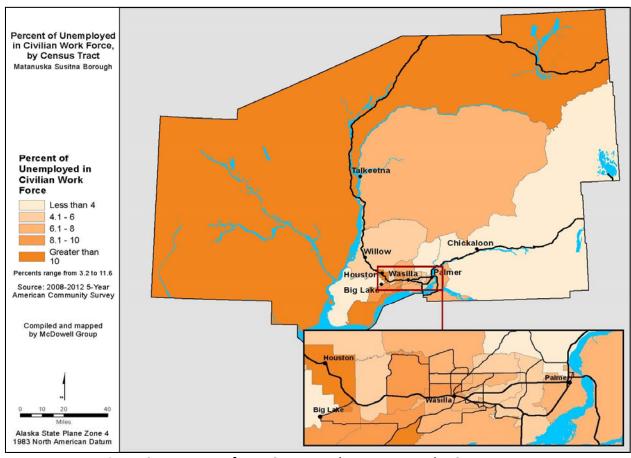


Figure 24. Percent of Mat-Su Unemployment Rate, by Census Tract

Three employment sectors - trade, transportation, utilities; educational and health services; and local government - together accounted for more than half (53 percent) of Mat-Su's wages in 2013.

Table 64. 2013 Matanuska-Susitna Borough Total Employment and Earnings by Sector

Sector	Ave. Monthly Employment	% of Employment	Total Earnings	% of Total Earnings
Trade, transportation, utilities	4,611	22%	\$147,088,635	18%
Educational and health services	4,014	19	149,744,082	18
Local government	3,180	15	141,774,731	17
Leisure and hospitality	2,520	12	41,152,930	5
Construction	1,799	8	110,839,168	13
State government	1,423	7	72,398,224	9
Professional and business services	1,243	6	58,619,588	7
Financial activities	744	4	30,588,700	4
Information	510	2	30,201,694	4
Manufacturing	207	1	7,857,009	1
Federal government	197	1	16,193,222	2
Natural resources and mining	159	1	6,001,471	1
Other	749	4	17,576,112	2
Unclassified establishments	45	<1	1,831,406	<1
Total	21,400	100%	\$831,866,973	100%

Due to rounding, some columns may not add to 100 percent.

Source: ADOLWD, 2013

APPENDIX B - Emergency Response Analysis Methodology

The BH emergency-response-data analysis included the following components:

- Socioeconomic data
- Key informant interviews
- Emergency Department/Urgent Care data
- First responder data
- Cost analysis
- Hot-spot analysis
- Literature review

Socioeconomic Data

Socioeconomic characteristics are strongly associated with health outcomes. A brief socioeconomic profile of the Matanuska Susitna Borough was compiled using data from Alaska Department of Labor and Workforce Development (DOLWD); Alaska Department of Commerce, Community, and Economic Development (DCCED); U.S. Census Bureau, American Community Survey (ACS); Bureau of Economic Analysis (BEA); and Economic Research Service (ERS) USDA.

Key Informant Interview/Contacts

The Mat-Su Health Foundation coordinated interviews with providers and stakeholders in the Mat-Su Emergency Response System. McDowell Group conducted interviews with Palmer and Wasilla 911 dispatch, Alaska State Troopers, Mat-Su Borough Emergency Medical Services, Mat-Su Borough Health Services, Providence Psychiatric Emergency Department, and Alaska Psychiatric Institute. McDowell Group also contacted officials in the State of Alaska Division of Behavioral Health and WEKA Transport.

Emergency Department/Urgent Care Data

McDowell Group and MSRMC signed a data-sharing agreement to provide McDowell Group with a limited data set from the ED/UC medical record. This data did not disclose any patient names but included patient identifier numbers to facilitate analysis of 2013 ED/UC usage at the individual patient level. Records included:

- Date of visit
- Length of stay
- Gender
- Age at date of visit
- Geographic location
- Discharge status
- Payment source (Private, Medicaid, Medicare, self-pay, etc.)
- Diagnosis codes (including behavioral health screenings, e.g., alcohol and tobacco)
- Cost/charge data

Patient total charges were also included to enable a financial-impact analysis. While charges do not necessarily reflect amounts actually paid by individuals or insurers, they are a useful proxy for all

the costs associated with an ED visit. In both the ED and UC data, the physician charges are excluded.

Once received, the data required coding by:

- <u>Demographic Location:</u> In order to preserve patient confidentiality, visit-summary information was tracked by ZIP code, not by individual addresses.
- <u>Clinical Classification:</u> The data file included 3,851 different ICD-9-CM diagnostic codes. ICD-9 diagnostic codes are internationally standardized to describe a patient's diagnosis consistently for all care providers. Using national clinical classification guidelines, MSRMC ED/UC patients with BH diagnoses recorded during an ED visit were categorized under one or more 13 Mental and Substance Abuse Disorders.

National comparisons were made by comparing MSRMC data with data from the Agency for Healthcare Research and Quality (AHRQ). The link http://www.hcup-us.ahrq.gov/nedsoverview.jsp leads to the National Emergency Department Sample (NEDS), where AHRQ provides more background on the NEDS data elements.

First Responder Data Analysis

First responder data was obtained from 911 Dispatch, Mat-Su Emergency Services, and Alaska State Troopers. Where possible, actual utilization data was matched to expenditures. In some cases, data was extrapolated to calculate an annual impact. Models were constructed to estimate the cumulative impact of specific patient populations on the BH Emergency Response System. BH categories used by 911 dispatch differ from the diagnosis categories used at MSRMC. Additionally, whether a call is BH-related is determined by the 911 dispatcher at the time of the call.

Analysis of ED Costs Associated with Behavioral Health

Cost analysis was conducted on cases identified by first responders as primarily BH emergencies. McDowell Group obtained incident information, financial data, service loads, and approximations of BH loads from Palmer Dispatch, Mat-Su Borough EMS, Division of Behavioral Health, MSRMC, and other program budget documents.

The ED charge amount data included charges for BH patient services to ED patients who were discharged home or transferred. There was no data distinct to ED charges for patients who were admitted. An average BH ED charge was applied to admitted patients to estimate total charges of BH patient use of the MSRMC ED.

Hot-spot Analysis

Preparing Data for ArcGIS

Two sources of data were used for the hot-spot analysis: medical visit information provided by the MSMRC ED and UCC, and spatial information in the form of a shapefile of ZIP+4s. The data was organized by visit and included patient information such as age, gender, and insurance type, and visit-specific data such as discharge disposition, diagnoses, length of stay, and cost of stay. A ZIP+4 number was derived from the address provided by the patient and assigned to the other information. However, in observance of HIPAA requirements, no patient names or actual addresses were included in the data set.

The ZIP+4 shapefile, acquired from Korem, provided the means to relate medical information to a map. The resolution for ZIP+4 locations of the Korem shapefile is variable. In urban centers like Wasilla and Palmer, each ZIP+4 is geocoded to a unique location. In more rural areas, such as Talkeetna and Skwentna, ZIP+4s are geocoded to a location common to many, if not all, Zip+4's with the same 5-digit zip code. This makes the mapping and hot-spot analysis more precise in the urban areas of Mat-Su as compared to the rural areas.

The medical information was received as a Microsoft Excel spreadsheet and was initially organized by individual hospital visits. These visits were assigned to three categories based on the medical facility at which they took place: UCC visits, ED visits, and All visits (UCC and ED combined). Within each of these categories, the data was reorganized by patient number, rather than individual visits, with the number of visits per patient in 2013 tallied and recorded. Then, patients were separated into three groups: All patients, BH patients, and non-BH patients. A patient was sorted into the BH group if, on any one of their visits, they had been diagnosed with a BH disorder. Grouping and organizing the medical information in this manner allowed for hot-spot analysis at a broad level (e.g., observing all patients at both the ED and UCC) as well as more focused levels (e.g. the subset consisting only of BH patients from the ED). In their final form, the files included the ZIP+4 of the address listed by the patient, the geographic coordinates of that ZIP+4, and the number of visits per patient.

ArcGIS Hot-spot Analysis

After organizing the medical information in Microsoft Excel, the data was transferred to ArcGIS for hot-spot analysis. The categories of patients were mapped, creating shapefiles, according to the ZIP+4 locations. These mapped shapefiles were incorporated into the ArcGIS tool, "Optimized Hot-spot Analysis."

The ArcGIS hot-spot analysis tool takes a set of weighted features - features assigned varying values - and determines whether and where "hot-spots" exist, i.e., whether and where features with high values cluster spatially. The tool assesses each feature and its value, and compares it to nearby features and their values and to the average value for all features. To form a hot-spot, a set of features must lie in proximity to each other and have generally higher values than the rest of the data set. The "Optimized Hot-spot Analysis" determines which features form hot-spots and also calculates the probability that an observed spatial pattern is not random. The tool outputs a set of feature points and maps the data according to this probability, or confidence level, to display statistically significant hot-spots.

For this analysis, the assessed features were the ZIP+4 points of the patients. The values assigned to these features were the number of visits per patient. The data was run through the "Optimized Hotspot Analysis." Then, with the Natural Neighbor "Interpolation" tool, the hot-spot analysis results were converted into overlay surfaces (or maps).

Literature Review

The literature review assessed the relevance of evidence-based, BH-related models incorporated within EDs and associated emergency systems to areas of similar geographic size and rural conditions as the Mat-Su Borough. Appendix C provides brief summaries and citations for studies relevant to the hot-spot analysis.

BH Emergency Response System

For purposes of this analysis, the BH Emergency Response System begins when First Responders (including 911 dispatch, law enforcement, EMS, or Alaska Family Services Crisis Line) are called to intervene because an individual may be experiencing a BH crisis. The ED department is also part of this system. This Emergency Response System analysis does not include prevention or treatment within the spectrum of emergency care; however, it is understood that some individuals who are experiencing a BH crisis may access services of prevention or treatment programs or providers. A description of each of the Emergency Response System components was produced by the Mat-Su Health Foundation and may be found in *Section 1 – Service Gap Analysis* and *Section II - Community Perceptions* of this report.

APPENDIX C Best Practices Literature Review

Below are citations and brief summaries of "best practices" models reviewed.

23-hour Crisis Stabilization/Observation Beds, also known as Extended Observation Units (EOUs)

Population Served: Adults (minimum age depends on program, but typically ranges from 18 to 21 years old) who need short-term (less than 24 hours), intensive treatment that is less restrictive than hospitalization. Appropriate for individuals who are suicidal or whose ability to cope in the community is severely compromised.

Example Location(s) of the Program: Alaska (Anchorage-Providence Psychiatric Emergency Department), rural Iowa, Florida, Missouri, Arizona, North Carolina, Nevada, and California.

Settings: May be found in some communities as a stand-alone service, in the hospital emergency department, or embedded within a Crisis Stabilization Unit (CSU).

Program Administration: Medical, psychiatric, and nursing staff.

Description of the Program: This is a short-term service that lasts less than 24 hours. It often includes medication administration, opportunities to meet with the patient's family and friends, and referral to more appropriate services. Before or at admission, a comprehensive assessment is conducted and a treatment plan developed. The treatment plan often includes delineation of necessary crisis intervention services necessary to stabilize and restore the patient to a level of functioning that does not require hospitalization.

Goals: Reduce the severity of a crisis and/or need for urgent care through prompt assessments, stabilization, and/or determination of the appropriate level of care.

Outcomes: Decreased hospitalizations and ED visits.

Funding: State and local, Medicaid, insurance.

References:

Little-Upah, P., Carson, C., Williamson, R., Williams, T., Cimino, M., Mehta, N., Buehrle, J., & Kisiel, S. (2013). The Banner Psychiatric Center: a model for providing psychiatric crisis care to the community while easing behavioral health holds in emergency department. *The Permeate Journal*, 17(1), 45-49. http://dx.doi.org/10-7812/TPP/12-016

Nebraska Health and Human Services. (n.d.). 23-hour crisis observation, evaluation, holding and stabilization. Retrieved June 29, 2014 from http://dhhs.ne.gov/medicaid/documents/crisis.pdf Substance Abuse and Mental Health Services Administration. (2014). Crisis services: effectiveness, cost-effectiveness, and funding strategies. Retrieved from

http://store.samhsa.gov/shin/content//SMA14-4848/SMA14-4848.pdf

Technical Assistance Collaborative, Incorporated. (2005). *A community-based comprehensive psychiatric crisis response service*. Retrieved June 16, 2014 from http://www.tacinc.org/media/13106/Crisis%20Manual.pdf

Project Alcohol and Substance Abuse Services, Education, and Referral to Treatment (ASSERT); Screening Brief Intervention and Referral to Treatment (SBIRT)

Population Served: Patients arriving within an emergency setting with alcohol or drug use.

Example Location(s) of the Program: In urban, suburban, rural, frontier, and tribal areas. Began in the Boston Medical Center in Massachusetts, and presently, there are more than 30 sites in Connecticut, Massachusetts, and New York. Sites also include Harborview Medical Center in Seattle, Washington, and the Alaska Native Medical Center (ANMC).

Settings: Health clinics and Emergency Departments (EDs).

Program Administration: Peer educators and ED staff members.

Description of the Program: Project ASSERT is a screening, brief intervention, and referral to treatment (SBIRT) model in which individuals visiting a participating health clinic or ED for medical care are screened for substance abuse. Screening is completed peer educators and/or ED staff. Patients with a positive screening result receive a brief negotiated interview (BNI). A BNI is a semi-scripted, motivational interview counseling session that focuses on the negative consequences associated with drug and alcohol use.

Goals: ASSERT programs aim to identify ED patients with substance abuse problems and provide intervention to those patients. Intervention may extend beyond the BNI to outpatient treatment and referrals to treatment agencies. The program also attempts to reduce ED visits and the impacts of further substance abuse on the patient.

Outcomes: Decreased substance use. The Washington State Department of Social and Health Services (2010) found the following: (a) patients who received at least a brief intervention were more likely to enter substance use treatment than similar ED patients who received no screening/intervention for substance abuse disorders; (b) the average number of days of alcohol use, binge drinking, and use of other drugs declined six months after receiving a brief intervention; (c) the percent of patients who were abstinent from alcohol or other drugs increased six months after a brief intervention; (d) social outcomes improved; and (e) mental health problems decreased.

Funding: Partially/fully funded by National Institutes of Health.

References:

SAMHSA's National Registry of Evidence-based Programs and Practices. (2014). *Project ASSERT*. Retrieved June 24, 2014, from http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=222 Washington State Department of Social & Health Services. (2010). Washington state screening, brief intervention, and referral to treatment program. *Research and data analysis division*. Retrieved from http://www.dshs.wa.gov/pdf/ms/rda/research/4/83.pdf.

Family Intervention for Suicide Prevention (FISP)

Population Served: Youth aged 10-18 years old who have considered or attempted suicide.

Example Location(s) of the Program: Urban and suburban areas of California and Massachusetts.

Settings: Emergency department (ED), inpatient, outpatient, residential, school, and other community programs.

Program Administration: Mental health providers.

Description of the Program: FISP is a cognitive behavioral family intervention targeted at youth who enter an ED with suicidal ideation or after a suicide attempt. FISP focuses on the following:

- Reframing the suicide thoughts or attempt as a problem requiring action by educating families about the importance of outpatient mental health treatment and restricted access to attempt methods.
- Strengthening family support by encouraging youth and parents to identify positive attributes of each youth and his or her family.
- Developing a hierarchy of potential suicide triggers by using an "emotional thermometer" to identify feelings and physical, cognitive, and behavioral reactions to triggers.
- Creating a safety plan that includes a safety plan card as a concrete tool that youth can use
 during times of acute stress and suicide risk to cue reminders of living and safe, adaptive
 coping measures. Attempting to obtain a commitment from the youth to use the plan.
- Youth can create a "hope box," which expands on the safety plan card which contains concrete objects (i.e., CDs, playlists of calming music, scented bubble bath, coping cards, etc.) to cue the use of the coping strategies listed on the card.

Furthermore, the FISP has three core components:

- ED staff training to improve ED care and the quality of the ED environment.
- Youth and family crisis therapy sessions to enhance protective processes and skills to reduce the risk of suicidal behavior.
- Follow up telephone contact, beginning within the first 48 hours after discharge, to remind and motivate the youth and his or her family. Calls include the message that a therapist is available to assist in follow-up care. They also serve to monitor the youth's status and link them to appropriate treatment and services. Telephone contacts generally continue weekly until the youth is successfully linked with necessary care.

Goals: Use the ED visit as an opportunity to build coping skills and provide access to treatment for the youth and their family in order to decrease the short-term risk of repeated suicidal thoughts and behavior.

Outcomes: Increased linkage to outpatient mental health treatment.

Funding: Partially/fully funded by National Institutes of Health.

References:

SAMHSA's National Registry of Evidence-based Programs and Practices. (2014). *Family intervention for suicide prevention (FISP)*. Retrieved June 23, 2014 from

http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=377

Mobile Crisis Services

Population Served: Individuals of all ages seeking services.

Example Location(s) of the Program: Rural, urban, suburban: rural North Carolina-Appalachian Community Services (ACS).

Settings: Community settings (i.e., residences, schools, offices, police stations, outpatient community settings, and emergency departments).

Program Administration: Typical rural programs include a dispatcher, a psychiatrist, and two to five licensed clinicians at the master's or doctoral level. Other qualified professionals often assist with intervention and follow-up.

Description of the Program: Mobile crisis teams intervene quickly, day or night, wherever the crisis occurs. Responsibilities may include, but are not limited to, providing pre-screening assessments, acting as gatekeepers for inpatient hospitalization, and managing and controlling access to crisis diversionary services. Calls to the crisis line typically come from those seeking services, family members of those in crisis, service providers, law enforcement, and EDs. Throughout 2010 and 2011, ACS had 3,945 calls to the crisis line, of which 2,469 resulted in a face-to-face intervention. Among the face-to-face interventions, 68 percent were performed in EDs; the rest were performed in client homes or other community settings. The high percentage of assessments conducted in the ED results from two factors: (a) many individuals present to the ED before calling mobile crisis; and (b) individuals who require inpatient treatment must be medically cleared prior to being accepted by the receiving facility.

Goals: Prevent and diffuse crises through community support services; avoid unnecessary use of the ED.

Outcomes: Effective crisis prevention and diffusion.

Funding: Medicaid.

References:

Technical Assistance Collaborative, Incorporated. (2005). *A community-based comprehensive psychiatric crisis response service*. Retrieved June 16, 2014 from http://www.tacinc.org/media/13106/Crisis%20Manual.pdf

Trantham, D., & Sherry, A. (2012). Mobile crisis management teams as part of an effective crisis management system for rural communities. *NC Medical Journal*, 73(3), 199-203.

Warm Lines

Population Served: Anyone with a behavioral health issue who is not in an urgent situation and is searching for information and would like to talk to a counselor.

Example Location(s) of the Program: Urban, rural, and suburban communities in 30 states across the nation.

Settings: Phone calls or text messaging.

Program Administration: Volunteer peer (i.e., those in recovery themselves) counselors with appropriate training.

Description of the Program: Warm lines are confidential phone-based call lines run by peers in non-crisis situations. The service provides social support, active listening, respect, and safety for those in need.

Goals: Decrease feelings of anxiety, loneliness, and/or depression; provide support.

Outcomes: Peer-run warm can decrease feelings of isolation and reduce use of crisis services.

Funding: Grants, state and local funding, donations.

References:

California Department of Mental Health. (2011). California suicide prevention hotline survey report. Retrieved July 6, 2014 from http://www.dhcs.ca.gov/services/MH/Documents/HotlineSurveyReport.pdf

Technical Assistance Collaborative, Incorporated. (2005). *A community-based comprehensive psychiatric crisis response service*. Retrieved June 16, 2014 from http://www.tacinc.org/media/13106/Crisis%20Manual.pdf

Warmlines. (n.d.). Need someone to talk to? Retrieved July 6, 2014 from http://www.warmline.org/

Crisis Intervention Training (CIT)

Population Served: Youth and adults living with mental illnesses who are in trouble with the criminal justice system.

Example Location(s) of the Program: Anchorage and Fairbanks, Alaska and over 2,700 sites throughout the nation.

Settings: The main component of the CIT is a Crisis Intervention Center (CIC), or its equivalent. The CIC is a center where multiple services are offered in one location (i.e., emergency mental health services, jail diversion/forensic case management, discharge planning, and homeless outreach/case management).

Program Administration: A partnership between police officers, mental health agencies, and advocates.

Description of the Program: CIT programs are local first-responder initiatives designed to improve the way law enforcement and the community respond to people experiencing mental health crises. Through community, health care, police, and advocacy partnerships, CIT programs reduce both stigma and the need for further involvement of criminal justice and emergency departments. CIT has been recognized as a best practice model by multiple organizations including National Alliance on Mental Illness (NAMI), the American Association of Suicidology, the National Association of People of Color Against Suicide, the Department of Justice, the Department of Health and Human Services (SAMHSA), the White House Conference on Mental Health, and the John Jay College of Criminal Justice.

Goals: Hospital diversion, jail diversion, low trauma, least restrictive alternatives, and improved officer and consumer safety.

Outcomes: With this type of crisis stabilization, there is an increase each year of clients staying within the emergency services of CIC in lieu of arrest (Gough & Weisman, 2014). CIT also increases the chances of an appropriate health care referral; may de-escalate crises; and improves the safety of patrol officers, consumers, family members, and community citizens.

Funding: Costs little to no money; grants and donations.

References:

Dupont, R., Cochran, S., & Pillsbury, S. (2007). Crisis intervention team core elements. Retrieved June 28, 2014 from http://www.cit.memphis.edu/information_files/CoreElements.pdf Gough, B., & Weisman, L. (2014). Mental health and law enforcement partnership in Arlington, Virginia—CIT in action. Retrieved June 19, 2014 from http://www.wciconferences.com/2014-CMHS-2/presentations/LeslieWeisman-CaptainBrianGough.pdf National Alliance on Mental Illness. (2014). intervention Retrieved Crisis teams (CIT). June 28, 2014 from http://www.nami.org/Template.cfm?Section=CIT&Template=/ContentManagement/Content Display.cfm&ContentID=150503

The University of Memphis. (n.d.). *CIT center*. Retrieved June 28, 2014 from http://www.cit.memphis.edu/

Peer-run Respites

Population Served: Adults (18 years old or older).

Example Location(s) of the Program: Urban, suburban, rural, and/or frontier in the United States and many other countries, including Alaska, New Hampshire, Maine, Massachusetts, West Virginia, Ohio, Georgia, New York, North Carolina, Arizona, Nebraska, United Kingdom, Sweden, Finland, Germany, Switzerland, Holland, and Denmark.

Settings: Crisis alternative home in a residential neighborhood.

Program Administration: Peer staff and other professional staff. Peer-run respites may vary in mission, capacity, and structure. However, "peer-run" always indicates that at least 51 percent of the staff are peers who have experienced a crisis themselves.

Description of the Program: Peer-run respites are community centers that offer inpatient, non-medical alternative crisis stabilization services. They are intended to provide a residential, judgment-free environment in which occupants can develop connections and learn how to handle future crises together. The centers are generally open around the clock, 365 days a year.

Goals: Provide a service that diverts hospitalization and emergency department visits through short-term stabilization; improve quality of life; and provide connections and relationships to lessen feelings such as anxiety, panic, anger, depression, etc.

Outcomes:

Several studies have outlined benefits of peer-run respites:

- One study found that peer-run respites contribute to lower psychopathology scores, fewer hospital re-admissions, and better global functioning (Coe, Stastny, & Musante, n.d.).
- Qualitative evaluations of the Sweetser Program in Maine and Rose House in New York show
 that guests found new ways to deal with and thrive in their self-definition, patterns of care,
 and relationships. Plus staff were more respectful and less stigmatizing (Ostrow, 2014).
- A mixed-methods study at Afiya in Massachusetts shows that if the peer-run respite had not been available, 56 percent of participants would have gone to the hospital. All participants reported that Afiya was more welcoming, offered clearer information, used more respectful language, and offered more opportunities to connect with others than a hospital (Ostrow, 2014).

Funding: Grants: Alaska Mental Health Trust and SAMHSA Transformation Grant.

References:

Coe, S., Stastny, P., & Musante, S. (n.d.). *Soteria-Alaska: an alternative to hospitalization for people diagnosed with serious mental illness*. Retrieved June 28, 2014 from

http://www.nyaprs.org/Collective Presentations/MusanteCoeStastnywkshp2C.pdf#page=1&zoom =auto,-6,-12

Ostrow, L. (2014). Peer crisis respites: research and practice initiatives in the United States.

Retrieved June 19, 2014, from http://www.wciconferences.com/2014-CMHS-

2/presentations/LayshaOstrow.pdf

National Empowerment Center. (2010). Mental health peer-operated crisis respite programs.

Retrieved June 28, 2014 from http://www.power2u.org/downloads/MH-

PeerOperatedCrisisRespitePrograms.pdf

Wisconsin Department of Health Services. (2014). *Peer run respite centers*. Retrieved June 28, 2014 from http://www.dhs.wisconsin.gov/peer-run-respite/

Assertive Community Treatment (ACT)/Program of Assertive Community Treatment (PACT)

Population Served: The ACT model fits for adults of all ages, as well as individuals in their late teens. Individuals who utilize this service usually have a severe and persistent mental illness that results in major deterioration in their ability to conduct basic adult functions (e.g., employment, self-care, and social and interpersonal relationships). ACT participants include those who have schizophrenia, other psychotic disorders (i.e., schizoaffective disorder), and bipolar disorder. Others who may benefit from ACT include those who have a limited understanding of their need for help, those who have bad experiences in the traditional system, and those who have difficulty keeping appointments.

Example Location(s) of the Service: The original ACT program is based in Madison, Wisconsin (termed Community Support Programs or CSP). Statewide programs exist in Florida (Florida Assertive Community Treatment or FACT), Rhode Island and Delaware (Mobile Treatment Teams or MTT), Virginia (PACT), Michigan, New Jersey, Texas, and Washington, D.C. Many more states have some ACT programs in a portion of the state, such as Washington (in the Downtown Emergency Service Center [DESC] PACT in Seattle). Rural ACTs are found in Wisconsin (Green County), New York, Iowa, Georgia, and 19 communities in North Carolina. A PACT is proposed for Alaska, as well.

Settings: A mobile team provides services in residential, outpatient, and/or other community settings, including the individual's home.

Administration: ACT teams works in shifts to provide continuous, around-the-clock services 365 days a year. Service-delivery teams are multi-disciplinary and often include staff trained in psychiatry, social work, nursing, substance abuse, and vocational rehabilitation.

Description of the Service Delivery Method: The ACT model is designed to limit the symptoms of mental illness experienced by each client. ACT is a service delivery model, not a case management program. Service-delivery models provide comprehensive, locally based treatment. Such treatment often involves practitioners from a variety of fields who work with the individual client instead of linking the client to other mental health agencies, rehabilitation, housing, and other institutions for treatment. According to NAMI, ACT clients experience less symptoms as a whole and spend significantly less time in hospitals. In one study, 18 percent of ACT clients were hospitalized in the first year of the study compared to 89 percent in the non-ACT group (NAMI, n.d.). Over 25 research studies report shorter hospital stays for clients of ACT (DESC, 2009).

ACT teams work collaboratively on treatment, rehabilitation, and support services in an effort to allow each client to live in their community. ACT assistance may include psychopharmacologic treatment, individual supportive therapy, counseling, behaviorally oriented skill teaching, supported employment, support for education, family members education, legal and advocacy services, financial support, supported housing, money management services, and transportation (NAMI, n.d.; SAMHSA, n.d.). ACT teams are typically mobile and share a small case load in which team members interact with clients as often as necessary (SAMHSA, n.d.). ACT team members provide support for clients whenever and wherever needed. The team is not governed by specific rules or discharge dates that are often part of other treatment programs (NAMI, n.d.; SAMHSA, n.d.).

Goals: ACT services are aimed at helping individuals meet their own basic needs and live increasingly independently, thus enhancing client quality of life.

Outcomes: Multiple studies show ACT programs reduce hospital days compared to case-management programs and outpatient clinic care (Lattimer, 2005 as cited in NAMI, 2007). In addition, Lambertini, Weisman, and Faden (2004) report an 83 percent reduction in jail days due to ACT program (as cited in NAMI, 2007).

Funding: Unknown.

References:

Allness. D., & Knoedler, W. (2003). *National program standards for ACT teams*. Retrieved June 21, 2014 from

http://www.nami.org/Content/NavigationMenu/NAMILand/POLactnationalstandards.pdf

Downtown Emergency Service Center. (2009). PACT Program of Assertive Community Treatment.

Seattle, WA: Author. Retrieved June 21, 2014 from http://www.desc.org/pact.html

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ACT information kit: http://store.samhsa.gov/product/Assertive-Community-Treatment-ACT-Evidence-Based-Practices-EBP-KIT/SMA08-4345

Emergency Department Means Restriction Education

Population Served: Caregivers of male/female 6-25 year olds at-risk for committing suicide.

Example Location(s) of the Program: Urban, suburban, rural, and/or frontier communities.

Settings: Outpatient.

Program Administration: A trained health care professional, such as a physician, nurse, social worker, or mental health specialist.

Description of the Program: Emergency Department Means Restriction Education is an intervention for the adult caregivers of youth who are seen in the emergency department (ED) for risk of committing suicide. Studies show that access to a firearm increases one's risk, yet many caregivers are unaware of the need to restrict this access. In a consult away from the adolescent, the ED Means Restriction Education practitioner helps parents/caregivers of at-risk youth to recognize the importance of immediate restriction to firearms, alcohol, and prescription over-the-counter drugs at home. Practical advice (i.e., firearm locking devices, locked medicine cabinets, turning in firearms to police, or moving them to another location outside the home) on how to lock up these items is also provided.

Goals: To educate caregivers on reducing access to substances and firearms that could be used in suicides and homicides.

Outcomes: Reduced access to medications that can be used in an overdose suicide attempt; reduced access to firearms.

Funding: Unknown.

References:

SAMHSA's National Registry of Evidence-based Programs and Practices. (2014). *Emergency department means restriction education*. Retrieved June 23, 2014 from http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=15

The Brief Negotiation Interview (BNI) for Harmful and Hazardous Drinkers

Population Served: 18-55 year olds; adults presenting for acute care in the emergency department (ED) who have a history of harmful and hazardous drinking.

Example Location(s) of the Program: Urban and suburban areas. Trained ED practitioners are located in a variety of locations, including Connecticut, California, Colorado, Georgia, Massachusetts, Michigan, New Jersey, New Mexico, Rhode Island, Virginia, and Washington, D.C.

Settings: Outpatient ED visit; adapted to include inpatient in the areas of obstetrics and gynecology, primary care, pediatrics (for children as young as 11 years), adolescent clinics, and psychiatry.

Program Administration: ED practitioner (attending physicians, physician assistants, or advanced practice registered nurses); more than 1,000 ED practitioners have received BNI training (i.e., two hours of training and proficiency testing).

Description of the Program: The BNI for harmful and hazardous drinking is a screening and brief intervention model designed to screen those at risk for alcohol use and driving under the influence (i.e., driving after consuming more than three drinks). If a patient consents to screening, he or she is administered a 17-item questionnaire regarding alcohol. The questions asked were recommended by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to identify harmful and hazardous drinkers (i.e., men 65 years and under drinking more than 14 drinks a week or more than four per occasion, men older than 65 or women of any age drinking more than 7 drinks a week or more than three per occasion). Patients who have a positive screening result receive the BNI from an ED practitioner during their stay in the ED (i.e., while waiting for the doctor, laboratory results, or medications). The BNI takes approximately 10 minutes. It uses motivational interviewing and cognitive behavioral strategies in the following order:

- The ED practitioner establishes rapport with the patient and asks for permission to discuss his or her alcohol consumption.
- The ED practitioner reviews the screening responses and provides feedback, placing the results within the contexts of the NIAAA's guidelines.
- The ED practitioner asks if the patient sees a connection between drinking and the ED visit.
- The ED practitioner assesses the patient's motivation to change using a scale of 1-10 (1 meaning not ready to change any aspect and 10 meaning very ready to change).
- The ED practitioner and patient negotiate a plan for change by setting goals, and the patient signs an agreement to decrease drinking.
- The ED practitioner arranges follow-up services with direct referrals to substance abuse treatment.
- The ED practitioner engages in an optional 10-minute follow-up by phone after one month.

Goals: Reduce patients' high-risk level of alcohol use through a patient-centered agreement.

Outcomes: Decreased alcohol use and decreased rate of driving after consuming more than three drinks.

Funding: Partially/fully funded by National Institutes of Health.

References:

SAMHSA's National Registry of Evidence-based Programs and Practices. (2014). *The Brief Negotiation Interview for Harmful and Hazardous Drinkers*. Retrieved June 27, 2014 from http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=343

Wellness Recovery Action Plan (WRAP)

Population Served: 26-55 year olds who have typically already experienced a mental health crisis event; WRAP materials are available in multiple languages and cultural adaptations, including English, Chinese, French, Japanese, Polish, and Spanish.

Example Location(s) of the Program: Found in rural, frontier, urban, and suburban communities throughout the world. In the United States, local and regional WRAP programs sponsored by mental health agencies and peer-run centers exist in every state. Twenty-five states have statewide integrated WRAP initiatives. In Alaska, there is a WRAP program in Anchorage. In addition, facilitator trainings are available yearly in the state through the Alaska Peer Support Consortium.

Settings: Residential, outpatient, and/or other community settings.

Program Administration: A trained WRAP facilitator. As of February 2010, more than 2,000 individuals had been trained as WRAP facilitators.

Description of the Program: WRAP is a self-designed plan to assist individuals in staying well, feeling better when not well, increasing personal responsibility, and improving their quality of life (Copeland, 2014). It is best utilized prior to and after a crisis in one's life (Federici, 2014). The major component of WRAP, the *Wellness Toolbox*, contains six sections and is designed to help one avoid a crisis:

- Daily Maintenance Plan. The plan includes a description of oneself when well, the Wellness
 Tools that must be used every day to maintain wellness, and a list of strategies that may be
 used on any day. Wellness Tools may include activities such as contacting friends and
 supporters, peer counseling, focusing exercises, relaxation and stress reduction techniques,
 journaling, affirming activities, exercise, diet, and sleep.
- 2. Triggers. This section lists triggers that could make one feel worse.
- 3. *Early Warning Signs*. This section identifies signs that let one know when he or she is beginning to feel worse (i.e., being unable to sleep, feeling nervous, etc.).
- 4. When Things are Breaking Down. This section helps identify when the situation has moved beyond early warning signs and the person is feeling worse (i.e., hearing voices, feeling sad all the time, etc.).
- 5. Crisis Plan or Advance Directive. This section categorizes the warning signs that necessitate action by others who may need to take over responsibility for care and assist with decision making. The plan or directive also includes health care information and other items or activities that may help in the situation.
- 6. Post Crisis Plan. This section is generally written as one is beginning to recover from a crisis. The plan details what one needs to get well. Plans are intended for daily review to help empower the individual to take control of their care and wellness.

Goals: The Wellness Toolbox facilitates crisis planning in order to help people stay in charge of any crisis. The planning process helps teach participants how to implement the key concepts of recovery (hope, personal responsibility, education, self-advocacy, and support) (NREPP, 2014).

Outcomes: Symptoms of mental illness diminish; recovery from mental illness; hope and self-advocacy (NREPP, 2014). With WRAP, individuals experience fewer visits to the emergency room,

reduced jail time, fewer psychiatric hospital days, and fewer crisis residential days (Copeland, 2014). Many peer-reviewed articles and studies exist regarding this evidence-based practice. For example, a randomized control trial study throughout six communities in Ohio (including rural, urban, and suburban areas) showed that WRAP recipients improved on the following outcomes: reduced psychiatric symptom severity, increased hopefulness, decreased coping through self-blame, increased quality of life, increased self-advocacy, increased recovery, and increased empowerment (Cook, 2011).

Funding: Partially/fully funded by National Institutes of Health.

References:

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http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=208

Emergency Telepsychiatry

Population Served: Patients presenting in an emergency department with a mental health crisis. **Example Location(s) of the Program**: In emergency departments in North and South Carolina, Maine, California, Mississippi, and through nationwide programs (such as InSight Telepsychiatry). Use of emergency room telepsychiatry is relatively low.

Settings: Primarily within emergency departments.

Program Administration: Emergency department staff, psychiatry professionals located outside the emergency department. Professionals who participate in a telepsychiatry program must be credentialed at each facility in which they provide services. In addition, if televisits occur across state lines, the professionals must be licensed in both the state they are located and the one in which the patient is located.

Description of the Program: This service provides psychiatric care through telecommunications technology in order to expedite care to emergency department patients who are at risk of psychiatric emergencies. This type of interaction with the patient allows for evaluation by the emergency department in a timely, efficient manner. This service is also useful in emergency situations associated with natural or manmade disasters. Some common diagnoses for emergency department telepsychiatry are depression, bipolar disorder, anxiety, substance use, and schizophrenia or schizoaffective disorder. Telepsychiatry allows emergency department staff to link patients with necessary psychiatric support through videoconference technology or, in some cases, the telephone or e-mail. Most telepsychiatry visits last five to 10 minutes. Based on the results of the visit, the patient is either transferred to a special facility, admitted to the hospital, scheduled for a future appointment, or discharged.

Goals: Efficient emergency department psychiatric care: reduction in number of admissions, reduced length of stay and need to board patients while waiting for an inpatient bed at the hospital, and more efficient (and equally effective) provision of care to patients.

Outcomes: While very few emergency department telepsychiatry programs seems to exist in the United States, increased mental health care in emergency departments reduces the potential for delays that lead to misdiagnosis, delays in treatment, and reduced costs because of delays and boarding. In a recent study, there was strong agreement in the results of face-to-face assessments when compared with telepsychiatry assessments. This study provided preliminary confirmation of the safety and efficacy of emergency department telepsychiatry in determining the need for inpatient care.

Funding: While some programs have designed methods to earn revenue, most ED telepsychiatry programs rely on grants and other public funding to remain financially sustainable.

References:

Seidel, R. and Kilgus, M. (2013) *Agreement between telepsychiatry assessment and face-to-face assessment for Emergency Department psychiatry patients*. Journal of Telemedicine and Telecare. November 8, 2013.

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APPENDIX D Selected Behavioral Health Screening Tools

Below is a list of various screening tools for BH conditions. While not all the screening tools listed below have been designed specifically for an ED setting, they may be useful candidates for a more consistent screening system across primary care, ED, and community programs.

General Screening

DSM - 5 Online Assessment Measures

For further clinical evaluation and research, the APA is offering a number of "emerging measures" in Section III of DSM-5. These patient assessment measures were developed to be administered at the initial patient interview and to monitor treatment progress, thus serving to advance the use of initial symptomatic status and patient reported outcome (PRO) information, as well as the use of "anchored" severity assessment instruments.

http://www.psychiatry.org/practice/dsm/dsm5/online-assessment-measures

The Healthy Living Questionnaire

Developed by SAMHSA, this tool is a 19-question questionnaire that address healthy living issues, including exercise, dental care, medication use, smoking, and mental health.

http://www.integration.samhsa.gov/clinical-practice/Healthy Living Questionnaire2011.pdf

Kessler 6 & Kessler 10

These are mental health screening tools used with a general adult population. http://amhocn.org/static/files/assets/bee05b2a/Kessler -10.pdf

Duke Health Profile (The DUKE)

This is a 17-item standardized self-report instrument containing six health measures (physical, mental, social, general, perceived health, and self-esteem) and four dysfunction measures (anxiety, depression, pain, and disability).

http://healthmeasures.mc.duke.edu/images/DukeForm.pdf

Patient Stress Questionnaire

This is a tool used in primary care settings to screen for BH symptoms. It was adapted from the PHQ-9, GAD-7, PC-PTSD, and AUDIT.

http://www.integration.samhsa.gov/Patient Stress Questionnaire.pdf

Suicide Screening

Suicide Prevention Toolkit for Rural Primary Care Providers

This tool was developed by WICHE staff in partnership with the Suicide Prevention Resource Center to provide the education and support needed to identify and address the critical needs of suicide patients.

http://www.sprc.org/for-providers/primary-care-tool-kit

SAFE-T (Suicide Assessment Five-Step Evaluation and Triage)

This tool was developed in collaboration with the Suicide Prevention Resource Center and Screening for Mental Health.

http://www.sprc.org/library_resources/items/safe-t-pocket-card

Suicide Behaviors Questionnaire (SBQ-R)

This tool assesses suicide-related thoughts and behavior. http://www.integration.samhsa.gov/images/res/SBQ.pdf

Depression Screening

Patient Health Questionnaire (PHQ-9)

This is the most common screening tool to identify depression. It is available in a modified version for adolescents.

http://www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf

Depression Tool Kit

MacArthur Foundation Initiative on Depression and Primary Care has created a Depression Tool kit is intended to help primary care clinicians recognize and manage depression.

https://www.lacare.org/files/English/file/Providers/Mental%20Health%20Resources/Macarthur Toolkit Depression.pdf

Drug and Alcohol Use Screening

Brief Negotiation Interview (BNI) for Harmful and Hazardous Drinkers

This tool is designed for ED patients. Patients with a positive screening are engaged in an interview that includes a discussion of the behavior, plan for change, and follow-up services. http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=343

Alcohol Screening and Brief Intervention for Youth: A Practitioner's Guide

This guide is designed to help health care professionals quickly identify youth at risk for alcohol-related problems. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) developed the guide in collaboration with the American Academy of Pediatrics, a team of underage drinking researchers and clinical specialists, and practicing health care professionals.

http://niaaa.nih.gov/PUBLICATIONS/EDUCATIONTRAININGMATERIALS/Pages/YouthGuide.aspx

Substance Use Screening and Assessment Database

Created by the Alcohol and Drug Abuse Institute Library at the University of Washington this database is intended to help clinicians and researchers find instruments used for screening and assessment of substance use and substance use disorders. Instruments whose validity and reliability have been well-studied are marked with a star.

http://lib.adai.washington.edu/instruments/

Screening, Brief Intervention, and Referral to Treatment

This is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders for use in community settings. The SAMHSA SBIRT page also includes curricula, online resources, and publications designed to help implement SBIRT initiatives. http://www.integration.samhsa.gov/clinical-practice/sbirt

AUDIT (Alcohol Use Disorders Identification Test)

This is a 10-item questionnaire that screens for hazardous or harmful alcohol consumption. Developed by the World Health Organization (WHO), the test correctly classifies 95% of people into either alcoholics or non-alcoholics. The AUDIT is particularly suitable for use in primary care settings and has been used with a variety of populations and cultural groups. It should be administered by a health professional or paraprofessional.

http://www.the-alcoholism-guide.org/alcohol-use-disorders-identification-test.html

NIDAMED

This is a comprehensive Physicians' Outreach Initiative that gives medical professionals tools and resources to screen their patients for tobacco, alcohol, illicit drug, and nonmedical prescription drug use. Developed by the National Institute on Drug Abuse, NIDAMED resources include an online screening tool, a companion quick reference guide, and a comprehensive resource guide for clinicians.

http://www.drugabuse.gov/nidamed-medical-health-professionals/tool-resources-your-practice/additional-screening-resources

CAGE AID

This is a commonly used, 4-question tool used to screen for drug and alcohol use. It is a quick questionnaire to help determine if an alcohol assessment is needed. If a person answers yes to two or more questions, a complete assessment is advised.

http://www.mgic.org/pdf/CAGE CAGE AID QUESTIONNAIRES.pdf

AUDIT-C

This is a simple 3-question screen for hazardous or harmful drinking that can stand alone or be incorporated into general health history questionnaires.

http://www.hepatitis.va.gov/provider/tools/audit-c.asp

DAST-10 (Drug Abuse Screen Test)

This is a 10-item, yes/no self-report instrument that has been condensed from the 28-item DAST and should take less than 8 minutes to complete. The DAST-10 was designed to provide a brief instrument for clinical screening and treatment evaluation and can be used with adults and older youth. http://smchealth.org/sites/default/files/docs/1309587937DRUGUSEQUESTIONNAIRE.pdf

Bipolar disorder Screening

STABLE Resource Toolkit

This toolkit provides quality improvement resources to help clinicians identify and manage bipolar disorder.

http://www.cqaimh.org/tool bipolar.html

Mood Disorder Questionnaire (MDQ)

This tool includes 13 questions associated with bipolar disorder symptoms. http://www.dbsalliance.org/pdfs/MDQ.pdf

Anxiety Disorder Screening

GAD-7 (Generalized Anxiety Disorder)

This is a 7-question screening tool that identifies whether a complete assessment for anxiety is indicated.

http://www.mpho.org/resource/d/34008/GAD708.19.08Cartwright.pdf

PC-PTSD

This is a four-item screen designed for use in primary care and other medical settings to screen for post-traumatic stress disorder. It is currently used by the Veteran's Administration. http://www.ptsd.va.gov/professional/assessment/screens/pc-ptsd.asp

Trauma Screening

Life Event Checklist (LEC)

This is a brief, 17-item, self-report measure designed to screen for potentially traumatic events in a respondent's lifetime. The LEC assesses exposure to 16 events known to potentially result in PTSD or distress and includes one item assessing any other extraordinarily stressful event not captured in the first 16 items.

http://www.ptsd.va.gov/PTSD/professional/pages/assessments/assessment-pdf/life-event-checklist-lec.pdf.

Abbreviated PCL-C

This is a shortened version of the PTSD Checklist – Civilian version (PCL-C). It was developed for use with in primary care or other similar general medical settings.

http://www.integration.samhsa.gov/clinical-practice/Abbreviated PCL.pdf

SAMHSA'S TEN ESSENTIAL VALUES IN RESPONDING TO A MENTAL HEALTH CRISIS

- 1. Avoid Harm
- 2. Intervening in Person-Centered Ways
- 3. Shared Responsibility
- 4. Addressing Trauma
- 5. Establish Feelings of Personal Safety
- 6. Based on Strengths
- 7. The Whole Person
- 8. The Person as a Credible Source
- 9. Recovery, Resilience, and Natural Supports
- 10. Prevention

SAMHSA'S PRINCIPLES TO ENACT THE TEN VALUES

- 1. Access to service and supports is timely.
- 2. Services are provided in the least restrictive manner.
- 3. Peer support is available.
- 4. Adequate time is spent with the individual in crisis.
- 5. Plans are strengths based.
- 6. Emergency interventions consider the context of the individual's overall plan of services.
- 7. Crisis services are provided by individuals with appropriate training and demonstrable competence to evaluate and effectively intervene with the problems being presented.
- 8. Individuals in self-defined crisis are not turned away.
- 9. Interveners have a comprehensive understanding of the crisis.
- 10. Helping the individual to regain a sense of control is a priority.
- 11. Services are congruent with the culture, gender, race, age, sexual orientation, health literacy and communication needs of the individual being served.
- 12. Rights are respected.
- 13. Services are trauma informed.
- 14. Recurring crises signal problems in assessment or care.
- 15. Meaningful measures are taken to reduce the likelihood of future emergencies.

Source: Practice Guidelines: Core Elements in Responding to Mental Health Crises. HHS Pub. No. SMA-09-4427. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2009

APPENDIX F: A Good and Modern Addictions and Mental Health Service System

Healthcare Home/ Physical Health	Prevention (including Promotion)	Engagement Services	Outpatient Services	Medication Services	Community Support (Rehabilitative)	Other Supports (Habilitative)	Intensive Support Services	Out-of-Home Residential Services	Acute Intensive Services	Recovery Supports
specialized outpatient medical services Acute primary care General health screens, tests and immunization Comprehensive Care management Care coordination and health promotion Comprehensive transitional care Individual and Family Support	Screening, Brief Intervention and Referral to Treatment Brief Motivational Interviews Screening and Brief Intervention for Tobacco Cessation Parent Training Facilitated Referrals Relapse Prevention/ Wellness Recovery Support Warm line	Assessment Specialized Evaluations (psychological, Neurological) Service planning (including crisis planning) Consumer/Family education Outreach	Individual Evidenced Based Therapies * Group therapy Family therapy Multi-family therapy Consultation to Caregivers	Medication management Pharmacotherapy (including MAT) Laboratory services	Parent/Caregiver Support Skill building (social, daily living, cognitive) Case Management Behavioral management Supported employment Permanent Supported housing Recovery housing Therapeutic mentoring Traditional healing services	Personal Care Homemaker Respite Supported Education Transportation Assisted Living Services Recreational Services Interactive Communication Technology Devices Trained behavioral health interpreters	Substance abuse intensive outpatient services Partial hospital Assertive community treatment Intensive home based treatment Multi-systemic therapy Intensive case management	Crisis residential/stabilizat ion Clinically Managed 24-Hour Care Clinically Managed Medium Intensity Care Adult Mental Health Residential Children's Mental Health Residential Services Youth Substance Abuse Residential Services Therapeutic Foster Care	Mobile crisis services Medically Monitored Intensive Inpatient Peer based crisis services Urgent care services 23 hour crisis stabilization service 24/7 Crisis Hotline Services	Peer Support Recovery Support Coaching Recovery Support Center Services Supports for Self Directed Care Continuing Care for Substance Use Disorders

^{*} Specific activities or services will need to be further defined in the next several months