Detox Services Demand Analysis
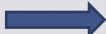
For the MAT SU HEALTH FOUNDATION

March 2017

Final Detox Study Report Forward

- This report includes new data, specifically:
    - Inclusion of general community hospital inpatient detoxification procedures in addition to inpatient detoxification services in Behavioral Health (BH) / Drug and Alcohol Treatment (D&A) Facilities provides a more comprehensive picture of service need. Limiting the study, as originally requested, to defined inpatient detox beds in a BH facility excluded the role community hospitals have in providing detox services. The inclusion of community hospital utilization results in a higher demand for inpatient detox bed need in Matanuska-Susitna Borough ("Mat Su") and Anchorage
    - Inclusion of drug and alcohol treatment services specifically for those arrested and requiring detoxification. This anticipates the impact of Alaska's SB91 law providing treatment alternatives for drug users instead of incarceration. This results in a higher demand for detoxification services in the community(vs. within the Department of Corrections facilities)
    - Inclusion of key elements from a survey of detox providers
    - Updated 2014 TEDs Admission data

schafer
consulting

Contents

- Forward

- Total Estimated Detox Services Need

- Executive Summary, Inpatient, Residential, Ambulatory Detox Demand

- Service Definitions, Data Notes and Limitations, Methodology, Assumptions and References

- Population Demographics

- National Drug & Alcohol Treatment Services Trends

- Inpatient Hospital Detox Bed Need

- Residential Detox Bed Need

Contents Continues ➡

schafer
consulting

Contents

- Ambulatory Detox Demand

- Criminal Justice System & Detox Services Need

- Drug and Alcohol Treatment Service Array – National and Mat Su / Anchorage

- Matanuska-Susitna / Anchorage Core Based Statistical Area (CBSA) Substance Abuse Treatment, Client Characteristics

- Appendix
  - Detox Survey Results
  - Inpatient Hospital Detox Demand Detailed Methodology
  - Residential Detox Demand Detailed Methodology
  - Ambulatory Detox Demand Detailed Methodology

schafer
consulting

Total Estimated Detox Services Need in Mat Su and Anchorage by the Year 2020, General Population and Arrestees, Ages 12 and Older

Detox Service	Total Need	Existing	Projected Deficit
Inpatient Hospital, both D&A Facility and Community Hospital	23 beds	No D&A Facility Beds, no reported designated Community Hospital Detox Beds	23 beds
Residential Detox*	18 beds	14 beds	4 beds
Ambulatory Detox	78 visits per day	None reported	78 visits per day

*Includes a 40% increase over the statistical demand to accommodate local provider wait times of 3 weeks, highly variable patient arrival fluctuations due to great distances patients must travel, and out-of-region referrals

schafer
consulting

Executive Summary: Overview

- The report is focused on determining the demand for substance abuse treatment services in three specific modalities:
  - Inpatient Hospital Detoxification
  - Residential Treatment Detoxification
  - Ambulatory Detoxification
- Demand is estimated and projected over the next thirty years (from 2015 through 2045) by three age groups (age 12-17, age 18-54, and age 55+)
- Demand is based exclusively on the populations in two regions as defined by the US Census, Core Based Statistical Area #11260
  - Matanuska-Susitna Borough ("Mat Su")
  - Anchorage
  - And these two regions combined

schafer
consulting

Executive Summary: Inpatient Hospital Detox Bed Demand

Inpatient Hospital Detox 2015-2025

a) The following table shows the need for inpatient community hospital beds <u>and</u> specialty BH Drug/Alcohol beds for Mat Su and Anchorage and for both the general population as well as arrestees

b) There were no non-governmental BH facility Inpatient Hospital Detox Beds in Mat Su Borough or Anchorage in 2015. There were also no known community hospital beds (e.g on an inpatient psychiatric unit) reported specifically for detox

c) With those assumptions, the region had a shortage of 22 Inpatient Hospital beds in 2015, increasing to 28 beds in 2045

d) A detailed breakdown by inpatient bed type (BH Facility, Community Hospital) and by general population and those arrested for crimes appears later in the report

schafer
consulting

Executive Summary: Inpatient Hospital Detox Bed Demand

Year	Age 12-17 Bed Need	Age 18-54 Bed Need	Age 55+ Bed Need	Total Inpatient Detox Bed Need by Year
Yr 2015	2	19	1	22
Yr 2020	2	19	1	23
Yr 2025	2	20	2	24
Yr 2030	2	21	2	25
Yr 2035	3	22	2	27
Yr 2040	3	23	2	27
Yr 2045	3	24	2	28

- The total Inpatient Hospital Detox bed need for the <u>general population as well as arrestees</u> in Mat Su / Anchorage is for 22 beds in 2015, increasing to 28 beds in 2045
- This is the combined inpatient hospital demand for both general community hospitals and specialty Behavioral Health (BH) facilities providing detox in Mat Su / Anchorage
- Nationally about 84% of detox procedures occur in community hospitals and 16% in specialty BH facilities

schafer
consulting

Executive Summary: Residential Detox Bed Demand

Residential Detox Bed Demand

a) The following table shows the need for Residential Detox beds for Mat Su and Anchorage and for both the <u>general population as well as arrestees</u>

b) There are 14 Residential Detox beds in Anchorage; these are not designated by age group

c) In 2015 the combined Mat Su and Anchorage region had a statistical deficit of 2 Residential Detox beds: an excess of 2 beds for adults, a 2 bed deficit for adolescents, and a 1 bed deficit for older adults.

d) In 2025 the combined is projected to have an overall 4 bed deficit, 3 too few beds for adolescents, a 0 bed deficit for adults, and a 2 bed deficit for older adults

e) **However because of the great distances patients must travel to receive Residential Detox services, out-of-region placements, and the provider reported wait times (about 3 weeks) for this service we recommend increasing the statistical demand by 40%. These could be "swing" beds to accommodate different age groups**

f) A detailed breakdown by Residential bed need by general population and those arrested for crimes appears later in the report

schafer
consulting

Executive Summary: Residential Detox Services @ 80% Occupancy

Year	Age 12-17 Bed Deficit Too Few Beds	Age 18-54 Deficit (Excess Beds)	Age 55+ Bed Need	Total Statistical Additional Residential Detox Bed Need	Existing Residential Detox Beds in Mat Su / Anchorage	Recommended Additional Residential Detox Beds (Adaptive Bed Allocation*)	Total Residential Detox Beds in Mat Su / Anchorage
Yr 2015	2.3	(2.0)	1.4	1.7	14	2	16
Yr 2020	2.5	(1.6)	1.6	2.5	14	4	18
Yr 2025	2.6	(0.2)	1.7	4.1	14	6	20
Yr 2030	2.7	1.3	1.8	5.8	14	8	22
Yr 2035	2.8	2.7	1.9	7.4	14	10	24
Yr 2040	2.8	3.5	2.0	8.4	14	12	26
Yr 2045	2.9	4.2	2.2	9.3	14	13	27

- There is a total projected operational Residential Detox bed deficit of 6 beds by 2025 in the combined regions for both the general population and arrestees
- A (negative number) = a statistical excess of beds

For Residential detox, we are recommending a 40% increase to the statistical demand in order to accommodate reported local provider operating wait times, out-of-region referrals, and highly variable patient arrival fluctuations / queuing delays due to the great distances many patients travel for this care in Alaska both within and beyond Mat Su and Anchorage

schafer consulting

Executive Summary: Ambulatory Detox Demand

- Demand for Ambulatory Detox is shown as the average number of visits per workday (using 249 workdays per year) and the total number of visits per year

- No existing Ambulatory Detox services were identified in either of the two regions based on Treatment Episode Data Set for Admissions in 2013 and in 2014

- The inclusion of arrestees in Mat Su and Anchorage to the general population ambulatory detox significantly increases the need for this service. Nationally courts and justice systems are sending many individuals to outpatient detox treatment

- In 2015, the demand by individuals in the general population and among those arrested for Ambulatory Detox visits in Mat Su and Anchorage was about 19,000 visits per year or 76 per work day

schafer
consulting

Executive Summary: Demand for Ambulatory Detox Visits

Arrestees and General Population	Year	Age 12-17 Visits Per Workday	Age 18-54 Visits Per Workday	Age 55+ Visits Per Workday	All Ages Visits Per Work Day Demand and Deficit*	Total Annual Demand and Deficit for Visits All Ages
	Yr 2015	2	71	3	76	18,967
	Yr 2020	2	72	3	78	19,462
	Yr 2025	3	76	4	82	20,446
	Yr 2030	3	80	4	87	21,566
	Yr 2035	3	84	4	91	22,574
	Yr 2040	3	86	4	93	23,211
	Yr 2045	3	88	4	95	23,774

- This is projected need for outpatient detox services in Mat Su and Anchorage for both the general population and arrestees; by the year 2025 this is about 82 visits per day
- Arrestees in Mat Su and Anchorage account for about 97% of the projected ambulatory detox need, suggesting services could be designed to focus on this population
- There are no documented ambulatory detox services in the region

schafer consulting

Service Definitions, Data Notes and Limitations, Methodology, Assumptions, References

Determining the Need for Detoxification Services

schafer
consulting

Service Definitions

Defining "Inpatient Hospital" in this Report

- Treatment Episode Data Set (TEDS) "Behavioral Health / Drug and Alcohol Treatment (D&A) Facility" or "D&A Treatment Facility"= Facilities reporting TEDS data generally receive State alcohol and/or drug agency funds for the provision of alcohol and/or drug treatment services. (SAMHSA TEDS codebook) These are often licensed by a State Dept. of Behavioral Health / MH/ Substance Abuse Treatment Agency

- Healthcare Cost and Utilization Project (H-CUP) "Community Hospitals" = "short term, non Federal, general, and other hospitals, excluding hospital units of other institutions (e.g. prisons). HCUP data include obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded are long-term care, rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals." (Healthcare Cost and Utilization Project Statistical, Nationwide Inpatient Sample database description)

Service Definitions

- TEDS Databases*:

  - "Behavioral Health / Drug and Alcohol Treatment (D&A) Facility" or "D&A Treatment Facility "I = This is Inpatient Hospital Detox = 24 hour per day medical acute care services in a hospital setting for detoxification of persons with severe medical complications associated with withdrawal

  - Residential Detox = 24 hour per day services in a non-hospital setting providing safe withdrawal and transition to ongoing treatment

  - Ambulatory Detox = Outpatient treatment services providing for safe withdrawal in an ambulatory setting (pharmacological or non-pharmacological)

- HCUP Databases**:

  - H-CUP "Community Hospitals" = "short term, non Federal, general, and other hospitals, excluding hospital units of other institutions (e.g. prisons). HCUP data include obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded are long-term care, rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals."

Treatment Episode Data Set Admissions (TEDS-A) 2014, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration Codebook
** Healthcare Cost and Utilization Project Statistical, Nationwide Inpatient Sample database description

schafer
consulting

Data Notes and Limitations

- Because Alaska has very few detoxification services, it is likely that any new or expanded detoxification program will have admissions from throughout the State, not just from two specific regions. _Serving more of the State would significantly increase actual operating demand_ and volume.
- This broader demand is factored into the Residential Detox bed need since local general hospitals provide Inpatient Hospital detoxification, for example, patients through the hospital Emergency Department
- The projections in the report are conservative and reflect **primarily the projected need for residents of Mat Su and Anchorage.**
- **Projected demand is separately defined for Mat Su and for Anchorage, and for the general population as well as those who have been arrested ("arrestees")**

schafer
consulting

Data Notes and Limitations

- Detoxification demand among arrestees are included separately and in addition to the general population in order to gauge the potential impact of Alaska's SB91, which is expected to result in greater utilization of community drug and alcohol treatment services, for example, through Pre Trial Services

- Utilization is based on the US Department of Health and Human Services, Substance Abuse and Mental Health Administration (SAMHSA) Treatment Episode Data (TED), the National Survey on Drug Use and Health (NSDUH), the Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (H-CUP), the FBI's Uniform Crime Reports, and survey results of detoxification providers in Alaska suggested by the Mat Su Health Foundation

schafer
consulting

Data Notes and Limitations

- This data identifies the number or frequency of admissions and discharges, not the number of individual clients or patients. One patient may have multiple admissions and discharges. A Demand study uses admissions and discharges to determine need, not the number of unique individuals

- "Bed deficit" is the difference between the projected need (or "demand") and the current number of beds. The current number of beds is based on the "Alaska Behavioral Health System Assessment, Regional Data Report 2009-2013" report, related regional assessments, provider survey results, and conference calls with detox providers in Mat Su / Anchorage

- Alaska does not participate, or does not have data available as of this report in the Healthcare Cost and Utilization Project (HCUP)National Inpatient Sample (NIS) or HCUP State Inpatient Database, nor the Nationwide Emergency Department Sample (NEDS), nor the FBI's National Incident-Based Reporting System (NIBRS). For this reason most utilization data is based on national rates. *The use of national data to make state and local level estimates is less reliable than the use of state level data.*

schafer
consulting

Methodology

- A formal Demand Analysis is used to determine the expected need for detox services in Mat Su Borough and in Anchorage, Alaska

- The analysis determined utilization rates per 10,000 US Resident Population for the three detoxification service types and applied those rates to the age groups in the two regions based on population in five year increments from 2015 through 2045

- Additional rates factored into the Demand Analysis include: Days Waiting for Treatment by each detox service type and age group, Deaths due to Alcohol or Drugs (inpatient hospital detox), and community hospital detox procedures

- Local provider input is also used to adjust the need for Residential Detox beds in Mat Su / Anchorage; this includes waiting lists, out-of-region placements, and high variances in access due to the great distances many patients travel for the service.

- Schafer Consulting's field experience with behavioral health services in Alaska and nationally is also expressed in the form of recommendations

schafer
consulting

Assumptions

- The study assumes that the utilization (admissions, median length of stay) of detoxification services will be consistent over the next five to ten years, and that death rates and days waiting for admission will stay about the same as 2013; total admissions and LOS rates for 2014 are close to those in 2013. Actual utilization may increase or decrease, effecting the projected need.

- Bed demand is calculated at 80% occupancy

- The Opioid epidemic (primarily opioid pain relievers and heroin) in the United States is driving unprecedented demand for drug treatment in all levels of care. The Substance Abuse and Mental Health Services Administration as well as recent peer-reviewed research indicate capacity is significantly below the need for treatment. See the following data

schafer
consulting

Assumptions

- Nationally, the rate of opioid abuse or dependence was 891.8 per 100,000 people while the treatment capacity was 540.2 per 100,000, or only 61% of needed capacity (a)

- As a result, this study assumes the Opioid epidemic will continue, as will the gap in service capacity, and specifically affects the demand for inpatient hospital detoxification (b)

Source: (a) Jones et all "National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment," American Journal of Public Health, June 11, 2015: e1-e9. doi:10.2105/AJPH.2015.302664

Source: (b) Owens PL (AHRQ), Barrett ML (M.L. Barrett, Inc.), Weiss AJ (Truven Health Analytics), Washington RE (AGRQ), Kronick R (AHRQ). Hospital Inpatient Utilization Related to Opioid Overuse Among Adults, 1993-2012. HCUP Statistical Brief #177. August 2014

schafer consulting

References

- The Demand Analysis uses Public Use Data files and reports from the US Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) Substance Abuse & Mental Health Data Archive (SAMHDA): Treatment Episode Data (TEDs) for Admissions (TEDS-A) and Discharges (TEDS-D) to determine utilization rates for Inpatient Hospital Detoxification, Residential Detoxification, and Ambulatory Detoxification services

- The study uses SAMHSA's National Survey of Drug Use and Health (NSDUH, 2014)

- TEDs A data is from both 2013 and 2014; the most recent TEDS Discharge data is for 2013

- Public Use Data Files and reports from the National Survey of Substance Abuse Treatment Services (N-SSATS) conducted by the US Dept. of Health and Human Services, SAMHSA, SAMHDA; 2013 and 2014

- Rates per 10,000 resident population are based on the U.S. Census Bureau, Population Division, "Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2015", Release Date: June 2016"

- Arrest data is from the FBI's Uniform Crime Reporting 2014 "Arrests by Age" Data, Table 38

schafer
consulting

References

- Community hospital detoxification procedures data is from the federal Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, 2014 National Inpatient Sample

- Matsu and Anchorage population projections are from the The Alaska Department of Labor and Workforce Development, Research and Analysis Section

- Death data is from the Centers for Disease Control and Prevention, National Vital Statistics System, Morbidity and Mortality Weekly Reports and the CDC WONDER online Mortality databases

- US Dept. of Health and Human Services, Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, HCUPnet online analysis system

- Owens PL (AHRQ), Barrett ML (M.L. Barrett, Inc.), Weiss AJ (Truven Health Analytics), Washington RE (AGRQ), Kronick R (AHRQ). Hospital Inpatient Utilization Related to Opioid Overuse Among Adults, 1993-2012. HCUP Statistical Brief #177. August 2014

schafer
consulting

References

- Local demographic data for the Matanuska-Susitna (Mat Su) and for Anchorage are from the Anchorage Core Based Statistical Area (#11260) which includes these two regions

- "National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment", Jones et all, American Journal of Public Health, June 11, 2015: e1-e9. doi:10.2105/AJPH.2015.302664

- Alaska Behavioral Health System Assessment, Regional Data Report 2009-2013, Matanuska-Susitna Borough Region, prepared for the Alaska Mental Health Trust Authority by Agnew::Beck Consulting, LLC and Hornby Zeller Associates, Inc. Updated 10.29.2015

schafer
consulting

References

- ICD-9 Detox Procedure Codes used for Community Hospital Utilization
  - 94.62 Alcohol Detoxification
  - 94.63 Alcohol Rehab/Detox
  - 94.65 Drug Detoxification
  - 94.66 Drug Rehab / Detox
  - 94.68 Combined Alcohol / Drug Detox
  - 94.69 Combined Alcohol / Drug Rehab / Detox

schafer
consulting

Population Demographics

Matanuska-Susitna / Anchorage Boroughs Core Based Statistical Area

schafer
consulting

Executive Summary Overview

Population is a key driver of demand

- The total population of Age Groups 12-17, 18-54, and 55+ in Mat Su Borough is projected to increase by 23,400 residents between 2015-2025, a 29% increase

- The total population of these age groups in Anchorage is projected to increase by 17,600 residents, a 7% increase between 2015-2025

- The Mat Su and Anchorage regions account for 54% of the total resident population of Alaska in 2015 and increases to 56% of the total Alaska population (all ages) by 2025

- Because the Mat Su and Anchorage regions are over half the State's population, it is very likely that any expanded detoxification services should anticipate admissions and utilization beyond the the demand from these two geographic areas

schafer
consulting

Population Summary

- Mat Su's population for the three age groups (age 12-17, 18-54, 55+) is expected to increase 85% by 2045, with the greatest increase among older adults (91%)

- Anchorage's population for the three age groups increases 16% by 20145, with older adults age 55+ having the highest increase (41%)

- In 2015 Mat Su's population for the three age groups accounts for 25% of the total age group population in both regions; this increases to 34% by 2045

- The combined regions population increases by 107,440 people from 2015 through 2045

- Planning for Detoxification services in the region will need to anticipate this overall growth as well as a significant increase in older adults

schafer consulting

Population: Treatment Age Groups

- The Substance Abuse and Mental Health Services Administration TEDS-A and Treatment Episode Data Set Discharges are organized into eleven age groups from 12 through 55 and over

- To study the need for Inpatient Hospital, Residential, and Ambulatory detoxification services the analysis uses the following age groups ("Age Groups"):

  - Adolescents age 12-17
  - Adults age 18-54
  - Older adults age 55+

schafer
consulting

Total Population – All Ages

Combined Regions Total Resident Population							
Region	Yr 2015	Yr 2020	Yr 2025	Yr 2030	2035	2040	2045	Percent Change
Mat Su	100,178	113,415	127,144	141,247	155,442	169,418	182,836	83%
Anchorage	298,908	309,692	318,629	325,533	330,821	335,148	339,171	13%
Total Regions	**399,086**	**423,107**	**445,773**	**466,780**	**486,263**	**504,566**	**522,007**	31%

- The total resident population of Mat Su Borough increases 83% from 2015 through 2045; this is a much higher rate of growth than Anchorage which increases 13% during this time
- Together the two regions increase from 399,000 to 522,000 people over the 30 year period

schafer
consulting

Population by Age Groups – Adolescents, Adults, Older Adults

Mat Su

Age Groups	2015	2020	2025	2030	2035	2040	2045	Percent Change
Age 12-17	8,983	10,484	11,462	12,031	13,127	14,547	15,970	78%
Age 18-54	48,473	53,737	60,869	68,649	75,702	81,887	88,593	83%
Age 55+	23,763	28,686	32,322	35,398	38,543	42,280	45,409	91%
Total	81,219	92,907	104,653	116,077	127,372	138,714	149,972	85%

Anchorage

Age Groups	2015	2020	2025	2030	2035	2040	2045	Percent Change
Age 12-17	23,446	24,715	25,237	25,947	26,319	25,667	25,309	8%
Age 18-54	159,274	157,716	161,038	165,666	169,696	169,999	168,895	6%
Age 55+	65,757	75,326	79,820	82,017	83,765	88,330	92,961	41%
Total	248,477	257,757	266,096	273,630	279,780	283,997	287,166	16%

Mat Su:
All age groups increase significantly

Anchorage:
Older adults increase 41%; adolescents and adults increase slightly

In 2015 Anchorage accounts for 75% of the combined regions population; by 2045, it drops to 66% of the combined regions population

schafer consulting

Mat Su Borough Population Change

Mat Su Borough Population Change by Age Groups
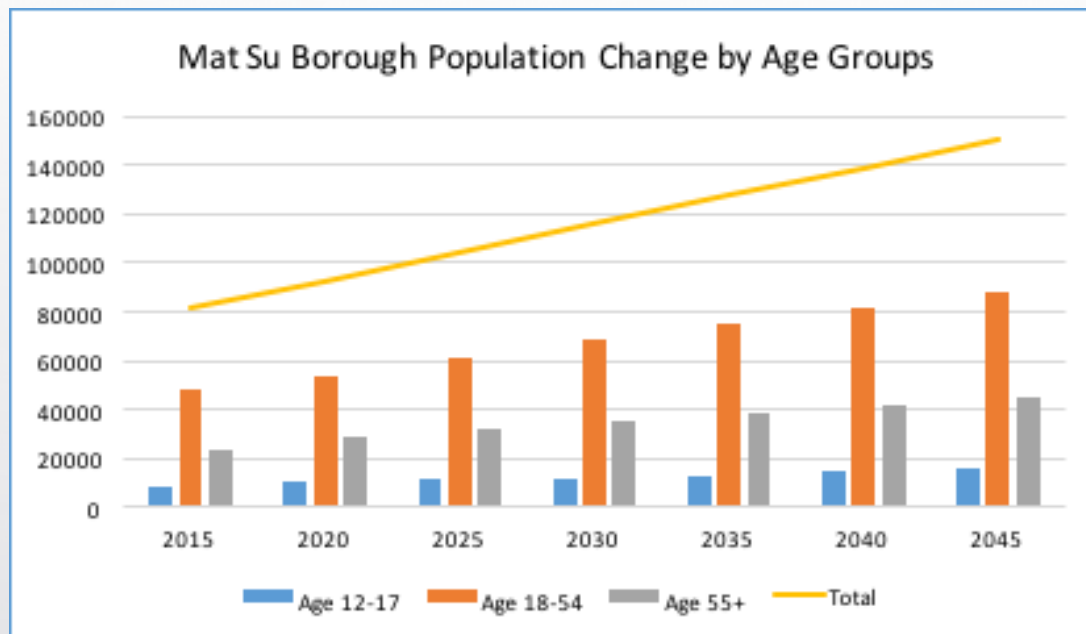
All age groups increase significantly, particularly for those age 55 and older (91%)

Anchorage Population Change

Anchorage Population Change by Age Groups
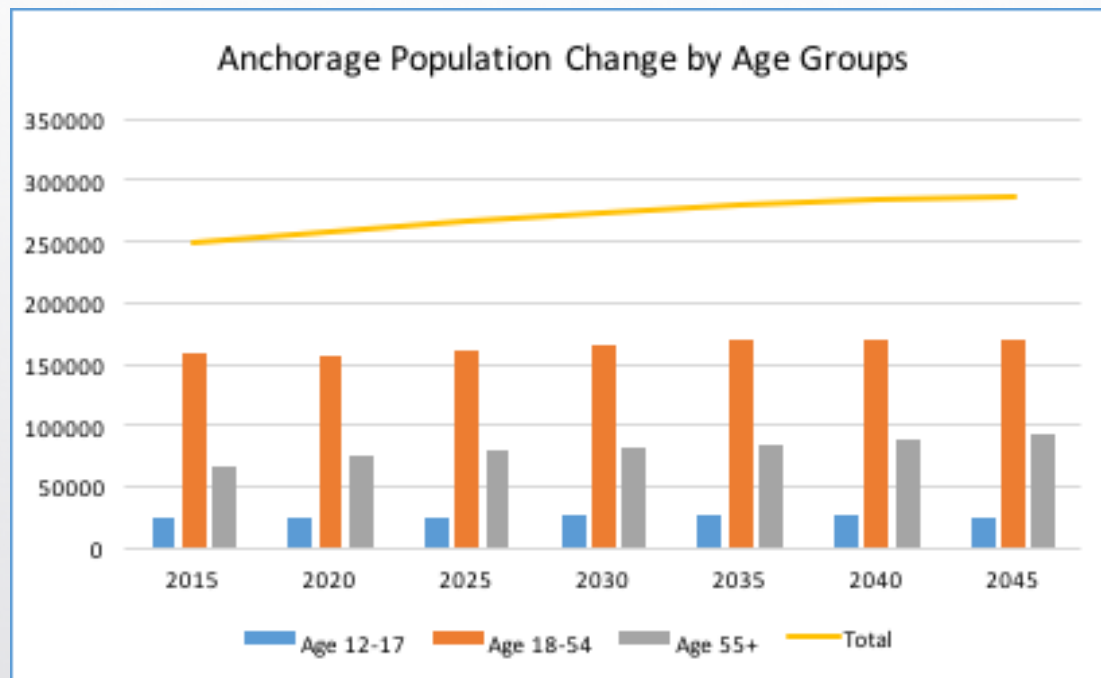
Those age 55 and older increase the most in Anchorage

By 2045, older adults account for 33% of the total resident population in the combined regions

National Drug & Alcohol Treatment Services Trends

Summary Trends Pertinent to Treatment Services and Demand for Detox

schafer consulting

National 2014 Drug & Alcohol Treatment Distribution by Service Type and Age Group

Age Group	Detox, Community Hospital	Detox, D&A Hospital Inpatient	Detox, 24 HR, Free Standing RES	Rehab/RES, Hospital Non Detox	Rehab/RES, Short Term (30 Days or Fewer)	Rehab/RES, Short Term (More than 30 Days)	Ambulatory, Intensive Outpatient	Ambulatory, Non Intensive Outpatient	Detox, Ambulatory	Grand Total
Age 12-17	295	199	1,828	15	6,079	6,252	10,087	53,553	3	78,311
Age 18-54	263,320	41,925	276,715	3,660	132,824	103,313	166,198	667,569	15,481	1,671,005
Age 55+	19,895	7,755	31,581	422	11,585	7,047	11,532	56,016	2,451	148,284
All Ages	283,510	49,879	310,124	4,097	150,488	116,612	187,817	777,138	17,935	1,897,600
Treatment Percent	[15%]	[3%]	[16%]	0%	8%	6%	10%	41%	[1%]	100%

- The table above includes detox services in Community Hospitals
- 41% of those receiving D&A treatment did so in a Non Intensive Outpatient setting
- Most detox services are provided in a Community Hospital or free standing Residential Treatment program, relatively few are provided in a D&A Inpatient facility

schafer consulting

2014 National Detox Only Service Setting

Detox Service Setting	D&A Inpatient	Community Hospital	Residential TX	Ambulatory	Total
Admissions	52,373	283,510	310,124	17,935	663,941
Admission %	8%	[43%]	[47%]	3%	100%
Patient Days	480,139	1,357,861	2,148,207	409,799	4,396,006
Patient Days %	11%	[31%]	[49%]	9%	100%
Rate per 10,000	19	70	79	15	184
Rate per 10,000 %	11%	38%	43%	8%	100%

Most detox admissions and patient days occur in RTCs and Community Hospitals

2014 Admission % by Detox Service Setting
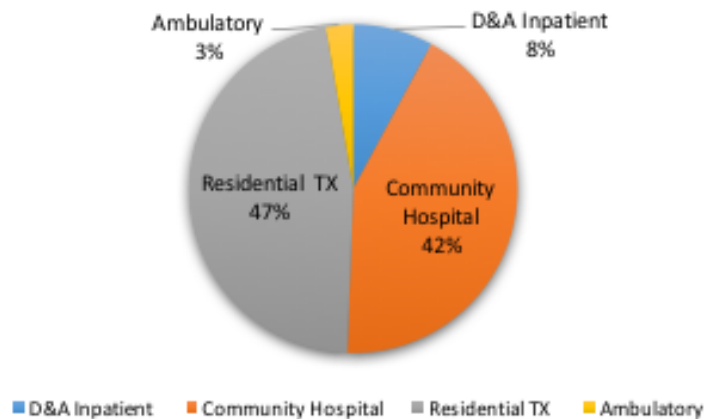
2014 Patient Days % by Detox Service Setting

schafer consulting
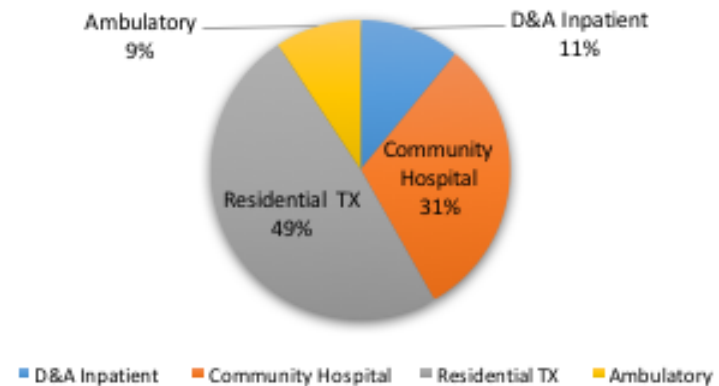
2014 National Detox Admissions by Age Group

Age Group	Age 12-17	Age 18-54	Age 55+	Total
National Sum of All Detox Admissions by Age Group	2,331	599,537	62,070	663,941
Age Group Percent	0.4%	90%	9%	100%

National 2014 Detox Admissions by Age Group

Age 55+ 9%

Age 12-17 1%
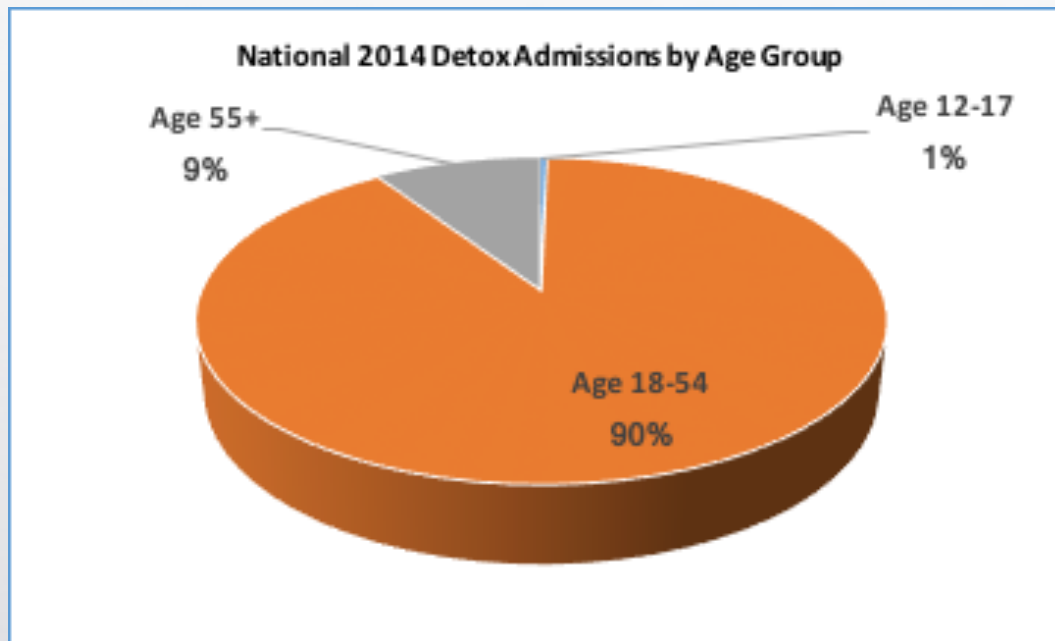
Age 18-54 90%

- Few adolescents received detox services in 2014
- Older adults accounted for less than 10% of detox services
- Adults age 18-54 received 90% of all detox services in 2014
- ➢ Detox services in Mat Su and Anchorage should focus mostly on those for adults

schafer consulting

Inpatient Hospital Detox Bed Need

Mat Su Borough and Anchorage 2015-2045

schafer
consulting

Two Inpatient Hospital Detox Settings

There are two types of inpatient hospital detox service settings that the study examines. Most detox occurs in community hospitals, typically following admission through the hospital Emergency Department. Community hospital utilization data has been added to the original report to give a more complete picture of inpatient hospital detox services and service need.

1. A D&A Treatment Facilities; often a Behavioral Health Hospital or Drug and Alcohol Treatment program

2. A Community Hospital, a general acute care hospital that is not owned or operated by a government entity

schafer consulting

Two Patient Populations Using Inpatient Hospital Detox

In addition to two different types of inpatient hospitals, there are also two populations each with distinct utilization patterns:

1. General population

2. Arrestees – individuals arrested for any offense: crimes against persons, property, society, and Group B offenses (e.g. disorderly conduct, DUI, Drunkenness, etc.)

For details regarding Arrestee data, please see the "Criminal Justice" section of the report

schafer consulting

Summary of Inpatient Hospital Detox Demand, <u>General Population</u> & <u>Arrestees</u>, Combined D&A and Community Hospitals, Mat Su and Anchorage

Arrestees and General Population, D&A Inpatient & Community Hospital Inpatient, Mat Su & Anchorage	Year	Age 12-17 Bed Need	Age 18-54 Bed Need	Age 55+ Bed Need	Total Inpatient Detox Bed Need by Year
	Yr 2015	2	19	1	22
	Yr 2020	2	19	1	23
	Yr 2025	2	20	2	24
	Yr 2030	2	21	2	25
	Yr 2035	3	22	2	27
	Yr 2040	3	23	2	27
	Yr 2045	3	24	2	28

- Although there are community hospitals providing inpatient detox, the number of beds "designated" only for this service alone is not known and assumed to be undefined
- There are no reported D&A Inpatient hospital beds in the region

Demographic	Beds	Percent
General Population	8	36%
Arrestees	14	64%
Total	22	100%

64% of the projected inpatient hospital detox bed need in 2015 is for those who have been arrested in Mat Su and Anchorage

➢ Alaska's SB91 is expected to shift the approach to corrections for those with drug and alcohol addictions from prisons to evidence-based pretrial supervision; in-prison and community-based alcohol and substance abuse treatment. Inpatient hospital detox services in the community will need to increase.

schafer
consulting

Inpatient Hospital Detox and Community Hospital Combined Bed Need Summary For the <u>General Population</u>

Mat Su & Anchorage General Population, D&A Facility and Community Hospital Bed Need	Year	Age 12-17 Demand	Age 12-17 Capacity	Age 12-17 Deficit	Age 18-54 Demand	Age 18-54 Capacity	Age 18-54 Deficit	Age 55+ Demand	Age 55+ Capacity	Age 55+ Deficit	Total Bed Deficit
	Yr 2015	0	0	0	7	0	7	1	0	1	8
	Yr 2020	0	0	0	8	0	8	1	0	1	8
	Yr 2025	0	0	0	8	0	8	1	0	1	9
	Yr 2030	0	0	0	8	0	8	1	0	1	9
	Yr 2035	0	0	0	9	0	9	1	0	1	10
	Yr 2040	0	0	0	9	0	9	1	0	1	10
	Yr 2045	0	0	0	9	0	9	1	0	1	10

- In 2015 there was an inpatient hospital bed shortage in Mat Su / Anchorage of 7 beds for adults, typically 2 in a D&A Facility and 5 in Community Hospitals; without the addition of designated inpatient detox beds in the region, this increases to a total demand for 8 adult beds in 2025
- The primary demand for inpatient hospital beds, both D&A and Community Hospitals is for adults
- In 2015 there was an overall one bed bed shortage for older adults which does not change going forward

schafer
consulting

Inpatient D&A Facility and Community Hospital Detox Bed Need Detail for Mat Su & Anchorage: <u>General Population</u>

Mat Su & Anchorage, D&A Facility Inpatient Hospital, General Population	Year	Age 12-17 Demand	Age 12-17 Capacity	Age 12-17 Deficit	Age 18-54 Demand	Age 18-54 Capacity	Age 18-54 Deficit	Age 55+ Demand	Age 55+ Capacity	Age 55+ Deficit	Total Bed Deficit	Reliability
	Yr 2015	0	0	0	2	0	2	0	0	0	2	High
	Yr 2020	0	0	0	2	0	2	0	0	0	2	High
	Yr 2025	0	0	0	2	0	2	0	0	0	2	High
	Yr 2030	0	0	0	2	0	2	0	0	0	3	Moderae
	Yr 2035	0	0	0	2	0	2	0	0	0	3	Moderate
	Yr 2040	0	0	0	2	0	2	0	0	0	3	Low
	Yr 2045	0	0	0	3	0	3	0	0	0	3	Low

Mat Su & Anchorage General Population, Communnity Hospitals Inpatient Detox	Year	Age 12-17 Demand	Age 12-17 Capacity	Age 12-17 Deficit	Age 18-54 Demand	Age 18-54 Capacity	Age 18-54 Deficit	Age 55+ Demand	Age 55+ Capacity	Age 55+ Deficit	Total Bed Deficit	Reliability
	Yr 2015	0	0	0	5	0	5	0	0	0	6	High
	Yr 2020	0	0	0	5	0	5	0	0	0	6	High
	Yr 2025	0	0	0	6	0	6	0	0	0	6	High
	Yr 2030	0	0	0	6	0	6	0	0	0	7	Moderae
	Yr 2035	0	0	0	6	0	6	1	0	1	7	Moderate
	Yr 2040	0	0	0	7	0	7	1	0	1	7	Low
	Yr 2045	0	0	0	7	0	7	1	0	1	7	Low

schafer consulting

Inpatient Hospital Detox and Community Hospital Combined Bed Need Summary For <u>Arrestees</u>

	Year	Age 12-17 Demand	Age 12-17 Capacity	Age 12-17 Deficit	Age 18-54 Demand	Age 18-54 Capacity	Age 18-54 Deficit	Age 55+ Demand	Age 55+ Capacity	Age 55+ Deficit	Total Bed Deficit	Reliability
Mat Su & Anchorage, Inpatient Hospital Detox*, Arrestees	Yr 2015	2	0	2	12	0	12	1	0	1	14	High
	Yr 2020	2	0	2	12	0	12	1	0	1	15	High
	Yr 2025	2	0	2	12	0	12	1	0	1	15	High
	Yr 2030	2	0	2	13	0	13	1	0	1	16	Moderae
	Yr 2035	3	0	3	14	0	14	1	0	1	17	Moderate
	Yr 2040	3	0	3	14	0	14	1	0	1	17	Low
	Yr 2045	3	0	3	14	0	14	1	0	1	18	Low

- The table above shows the likely inpatient hospital bed need for those arrested in Mat Su & Anchorage. Arrest data is based on national FBI rates. Please refer to the Criminal Justice System section of the report for more detail
- There may be some "cross over" between the projected inpatient bed need for the general population and for those arrested, but we estimate this to be small since those now arrested receive treatment services in corrections settings
- Bed utilization for those arrested is based on the NSDUH 2014 Substance Abuse and Mental Health Data Archive (SAMHDA) Public Use Data Files and Online Analysis tool
- * Because inpatient hospital detoxification services are not differentiated by D&A Facility and Community Hospital this distinction is not included in the above table

schafer consulting

Residential Detox Bed Need

Mat Su Borough and Anchorage 2015-2045

schafer
consulting

Residential Detox Adaptive Bed Demand @ 80% Occupancy in Mat Su/Anchorage for General Population & Arrestees

Arrestees and General Population, Residential Detox Demand	Year	Age 12-17 Bed Deficit Too Few Beds	Age 18-54 Deficit (Excess Beds)	Age 55+ Bed Need	Total Statistical Additional Residential Detox Bed Need	Existing Residential Detox Beds in Mat Su / Anchorage	Recommended Additional Residential Detox Beds (Adaptive Bed Allocation*)	Total Residential Detox Beds in Mat Su / Anchorage
	Yr 2015	2	(2)	1	2	14	2	16
	Yr 2020	2	(2)	2	3	14	4	18
	Yr 2025	3	(0)	2	4	14	6	20
	Yr 2030	3	1	2	6	14	8	22
	Yr 2035	3	3	2	7	14	10	24
	Yr 2040	3	4	2	8	14	12	26
	Yr 2045	3	4	2	9	14	13	27

- Based on national utilization data and considering the 14 bed residential detox facility in Anchorage, the *statistical demand* for RTC detox beds is insufficient based on a survey of providers in Alaska
- That survey and interactions with the provider community revealed that important forces should be factored into the real bed need: *wait times, out-of-region referrals, and highly variable patient arrival fluctuations / queuing delays due to the great distances many patients travel for this care*
- Based on the above, a 40% increase in beds ("*Adaptive Bed Allocation*) is factored into the projected actual local need

schafer consulting

Residential Detox <u>Statistical</u> Bed Demand @ 80% Occupancy in Mat Su/Anchorage for the General Population

Residential Detox Bed Demand, Mat Su & Anchorage, General Population	Year	Age 12-17 Demand	Age 12-17 Capacity	Age 12-17 Deficit	Age 18-54 Demand	Age 18-54 Capacity	Age 18-54 Deficit	Age 55+ Demand	Age 55+ Capacity	Age 55+ Deficit	Total Bed Deficit	Reliability
	Yr 2015	0	0	0	15	14	1	1	0	1	1	High
	Yr 2020	0	0	0	15	14	1	1	0	1	2	High
	Yr 2025	0	0	0	16	14	2	1	0	1	3	High
	Yr 2030	0	0	0	16	14	2	1	0	1	4	Moderae
	Yr 2035	0	0	0	17	14	3	1	0	1	4	Moderate
	Yr 2040	0	0	0	18	14	4	1	0	1	5	Low
	Yr 2045	0	0	0	18	14	4	1	0	1	5	Low

- This table shows the <u>statistical</u> bed demand based on national 2014 Treatment Episode Data Set utilization by the three age groups for the <u>general population </u>in Mat Su and Anchorage; the bed need is minimal
- However, while accurate using national admission, median length of stays, and days waiting for treatment, we do not believe this sufficiently factors in the "on the ground" situation in Alaska
- Improving data collection and reporting may help provide a foundation for more accurate local bed need analysis

schafer consulting

Residential Detox <u>Statistical</u> Bed Demand @ 80% Occupancy in Mat Su/Anchorage for Arrestees

	Year	Age 12-17 Demand	Age 12-17 Capacity	Age 12-17 Deficit	Age 18-54 Demand	Age 18-54 Capacity	Age 18-54 Deficit (Excess)	Age 55+ Demand	Age 55+ Capacity	Age 55+ Deficit	Total Bed Deficit	Reliability
Residential Detox Bed Demand, Mat Su & Anchorage, Arrestees	Yr 2015	2	0	2	11	14	(3)	1	0	1	0	High
	Yr 2020	2	0	2	12	14	(2)	1	0	1	1	High
	Yr 2025	2	0	2	12	14	(2)	1	0	1	1	High
	Yr 2030	2	0	2	13	14	(1)	1	0	1	2	Moderae
	Yr 2035	3	0	3	14	14	(0)	1	0	1	3	Moderate
	Yr 2040	3	0	3	14	14	(0)	1	0	1	3	Low
	Yr 2045	3	0	3	14	14	0	1	0	1	4	Low

- This table shows the <u>statistical</u> bed demand based on national 2014 Treatment Episode Data Set utilization and FBI Uniform Crime Report by the three age groups for those arrested in Mat Su and Anchorage; the bed need is slightly less than that for the general population
- Again however, while accurate using national admission, median length of stays, days waiting for treatment and FBI data, we do not believe this sufficiently factors in the "on the ground" situation in Alaska and recommend the bed need previously summarized for both Arrestees and the General Population in Mat Su and Anchorage

schafer consulting

Ambulatory Detox Demand

Mat Su Borough and Anchorage 2015-2045

Ambulatory Detox Need in Mat Su/Anchorage for the General Population and Arrestees

Ambulatory Detox Need, Mat Su & Anchorage, Arrestees and General Population	Year	Age 12-17 Visits Per Workday	Age 18-54 Visits Per Workday	Age 55+ Visits Per Workday	All Ages Visits Per Work Day Demand and Deficit*	Total Annual All Ages Demand for Ambulatory Detox Visits
	Yr 2015	2	71	3	76	18,967
	Yr 2020	2	72	3	78	19,462
	Yr 2025	3	76	4	82	20,446
	Yr 2030	3	80	4	87	21,566
	Yr 2035	3	84	4	91	22,574
	Yr 2040	3	86	4	93	23,211
	Yr 2045	3	88	4	95	23,774

- Work Day visits are based on 249 work days a year
- There are no or few ambulatory detox programs reported in the region

- There is relatively little projected demand for Ambulatory Detox among adolescents and older adults; the primary focus of outpatient detox services should be on adults
- It is evident from the following two slides that the greatest need for Ambulatory Detox is from those arrested rather than from within the general population

schafer consulting

Ambulatory Detox Need in Mat Su/Anchorage for the General Population

Ambulatory Detox Need, Mat Su & Anchorage, General Population	Year	Age 12-17 Visits Per Workday	Age 18-54 Visits Per Workday	Age 55+ Visits Per Workday	All Ages Visits Per Work Day Demand and Deficit*	Total Annual All Ages Demand for Ambulatory Detox Visits	Reliability
	Yr 2015	-	2	0	2	500	High
	Yr 2020	-	2	0	2	532	High
	Yr 2025	-	2	0	2	562	High
	Yr 2030	-	2	0	2	591	Moderae
	Yr 2035	-	2	0	2	617	Moderate
	Yr 2040	-	2	0	2	641	Low
	Yr 2045	-	2	0	3	663	Low

- There is not a high demand for Ambulatory Detox services among those in the General Population in Mat Su / Anchorage
- As shown below, the demand is significant for those referred by the criminal justice system

schafer consulting

Ambulatory Detox Need in Mat Su/Anchorage for Arrestees

Ambulatory Detox Need, Mat Su & Anchorage, Arrestees	Year	Age 12-17 Visits Per Workday	Age 18-54 Visits Per Workday	Age 55+ Visits Per Workday	All Ages Visits Per Work Day Demand and Deficit*	Total Annual All Ages Demand for Ambulatory Detox Visits	Reliability
	Yr 2015	2	69	3	74	18,467	High
	Yr 2020	2	70	3	76	18,930	High
	Yr 2025	3	74	3	80	19,884	High
	Yr 2030	3	78	4	84	20,975	Moderae
	Yr 2035	3	82	4	88	21,957	Moderate
	Yr 2040	3	84	4	91	22,570	Low
	Yr 2045	3	86	4	93	23,112	Low

- The greatest need (about 97% of the total annual need) for Ambulatory Detox services is for those referred by the courts and the Department of Corrections, particularly Pre Trial Service's diversion programs
- ➢ Because Ambulatory Detox services are most frequently used by the courts, and diverts from higher levels of care, this service is important for the region to develop

schafer consulting

Criminal Justice System & Detox Services Need

Projected Detoxification Services Demand for Arrestees in Mat Su / Anchorage in Anticipation of SB91 Impact on Community Providers

schafer
consulting

Criminal Justice System & Use of Community Detox Services

- SB91 intent is described as reinvesting in programs proven to reduce recidivism and protect public safety by directing funds over the next six years into evidence-based pretrial supervision; in-prison and community-based alcohol and substance abuse treatment; transitional support for offenders returning to the community; and victims' services and violence prevention programming (University of Alaska Anchorage Justice Center)

- Through communication with the Alaska Department of Corrections and the Mat Su Health Foundation and detox providers we were asked to estimate the impact of SB91on the demand for detoxification services in Mat Su / Anchorage

- The following slides describe the approach and data used for these estimates which are included in the previous demand projections for Inpatient Hospital, Residential, and Ambulatory Detox

Estimated and Projected Arrests by Age Group in Mat Su / Anchorage

- The following table shows estimates for the number of arrests in Mat Su / Anchorage and is based on national 2014 FBI Uniform Crime Report rates of arrest by age group per 10,000 population. This assumes the rate in Mat Su /Anchorage is comparable to that rate nationally.

Projected Total Arrests Mat Su / Anchorage by Age Group

Year	Age 12-17	Age 18-54	Age 55+	Age 12+ Total
2015	993	9,778	521	11,291
2020	1,078	9,952	605	11,635
2025	1,124	10,444	652	12,220
2030	1,163	11,028	683	12,874
2035	1,208	11,550	711	13,469
2040	1,231	11,855	760	13,846
2045	1,264	12,119	805	14,187

schafer
consulting

Methodology for Estimating Detox Needs Among Arrestees

- The Substance Abuse and Mental Health Data Analysis (SAMHDA)system was used to analyze detox utilization in the 2014 National Survey on Drug Use and Health

- Detox utilization data solely by this population for the State of Alaska was not available so national rates per 10,000 arrestees are used in the study

- Arrests by age group were not available for Mat Su and Anchorage; the FBI Uniform Crime Reports were used to determine an arrest rate per 10,000 arrestees; this rate was then applied to the Mat Su / Anchorage population

- A percent of the national population who were arrested in the past year and who also received detox in the past year is based on an analysis of the 2014 National Survey on Drug Use and Health; age group detox rates per detox service type are imputed

schafer
consulting

National Arrests per 10,000 by Age Group 2014

Age Group	Age 12-17	Age 18-54	Age 55+	Total
US 2014 Resident Population	24,995,419	159,030,365	86,277,855	270,303,639
National Arrests FBI UCR 2014	765,395	7,484,811	501,712	8,751,918
Arrests per 10,000 Population	306	471	58	324

- National Arrest Rate per 10,000 general population, FBI UCR 2014 data
- These arrest rates by age group per 10,000 are applied to the Mat Su / Anchorage general population

schafer
consulting

National Detox Distribution by Service Type and Age in 2014

- Based on the 2014 National Survey of Drug Use and Health, of those arrested and receiving a specific detox service in the past year:
  - 22% received Inpatient Detox
  - 30% received Residential Detox
  - 48% received Ambulatory Detox
- The age group distribution of those arrested and receiving any Detox service in the past year is:
  - Age 12-17: 15%
  - Age 18-54: 16%
  - Age 55+: 16%

Source: Substance Abuse and Mental Health Administration, Substance Abuse and Mental Health Data Analysis (SAMHDA) online analysis tool

schafer consulting

National Detox Rate Among Arrestees in 2014

- Based on the National Survey of Drug Use and Health in 2014 the following rates of detox per age group and per detox service type are applied to the need for Inpatient Hospital, Residential, and Ambulatory Detox in Mat Su / Anchorage among those arrested in the previous 12 months:

Age Group	% Inpatient of All Arrests Based on Distribution of Detox Type All Ages	% Residential for all Arrests Based on Distribution of Detox Type All Ages	% Ambulatory Based on Distribution of Detox Type All Ages	Total Percent by Age Group
Age 12-17	3%	5%	7%	15%
Age 18-54	4%	5%	8%	16%
Age 55+	3%	5%	7%	16%

schafer consulting

Detailed Methodology: Imputed Percent of Arrestees Receiving Inpatient, Residential, or Ambulatory Detox by Age Group

Age Group	Total Arrests	Percent of Arrestees That Received Detox	Arrestees Detoxed	Inpatient Detox @ 22% of all Detox Services	% Inpatient of All Arrests Based on Distribution of Detox Type All Ages	RTC Detox @ 30% of all Detox Services	% RTC for all Arrests Based on Distribution of Detox Type All Ages	OP Detox @ 48% of all Detox Services	% OP Based on Distribution of Detox Type All Ages	Total Percent
Age 12-17	450,640	15.3%	68,881	15,325	3.4%	20,754	4.6%	32,802	7.3%	15.3%
Age 18-54	4,612,917	16.4%	756,348	168,273	3.6%	227,889	4.9%	360,186	7.8%	16.4%
Age 55+	811,128	15.6%	126,930	28,240	3.5%	38,244	4.7%	60,446	7.5%	15.6%
Ages 12+	5,874,686	16.2%	952,159	211,838	22%	286,887	30%	453,434	48%	100.0%

- This table describes the methodology used to determine the percent of those arrested in the previous 12 months by both detox service type (Inpatient, Residential, and Ambulatory) as well as by age group
- The distribution of detox services by age group among arrestees is known but not by specific detox service and by age group (Inpatient, Residential, and Ambulatory) and (Ages 12-17, 18-54, and 55+)
- The resulting percentages for each service type and age group are used to estimate demand for detox services in Mat Su / Anchorage

schafer consulting

Overall 2014 National <u>Source of Referrals</u> to Drug & Alcohol Treatment Services by Legal Systems

	% Inpatient Detox	% Residential Detox	% Rehab / Res Hospital Non Detox	% Rehab Res Short Term	% Rehab Res Long Term	% Intensive Outpatient	% Outpatient	% Ambulatory Detox
Age 55+	0.4%	16.7%	0.1%	3.6%	5.5%	12.4%	60.0%	1.2%
Age 18-54	0.2%	9.0%	0.1%	4.9%	8.2%	15.2%	61.9%	0.5%
Age 12-17	0.02%	2.4%	0.0%	8.6%	7.7%	13.7%	67.5%	0.003%
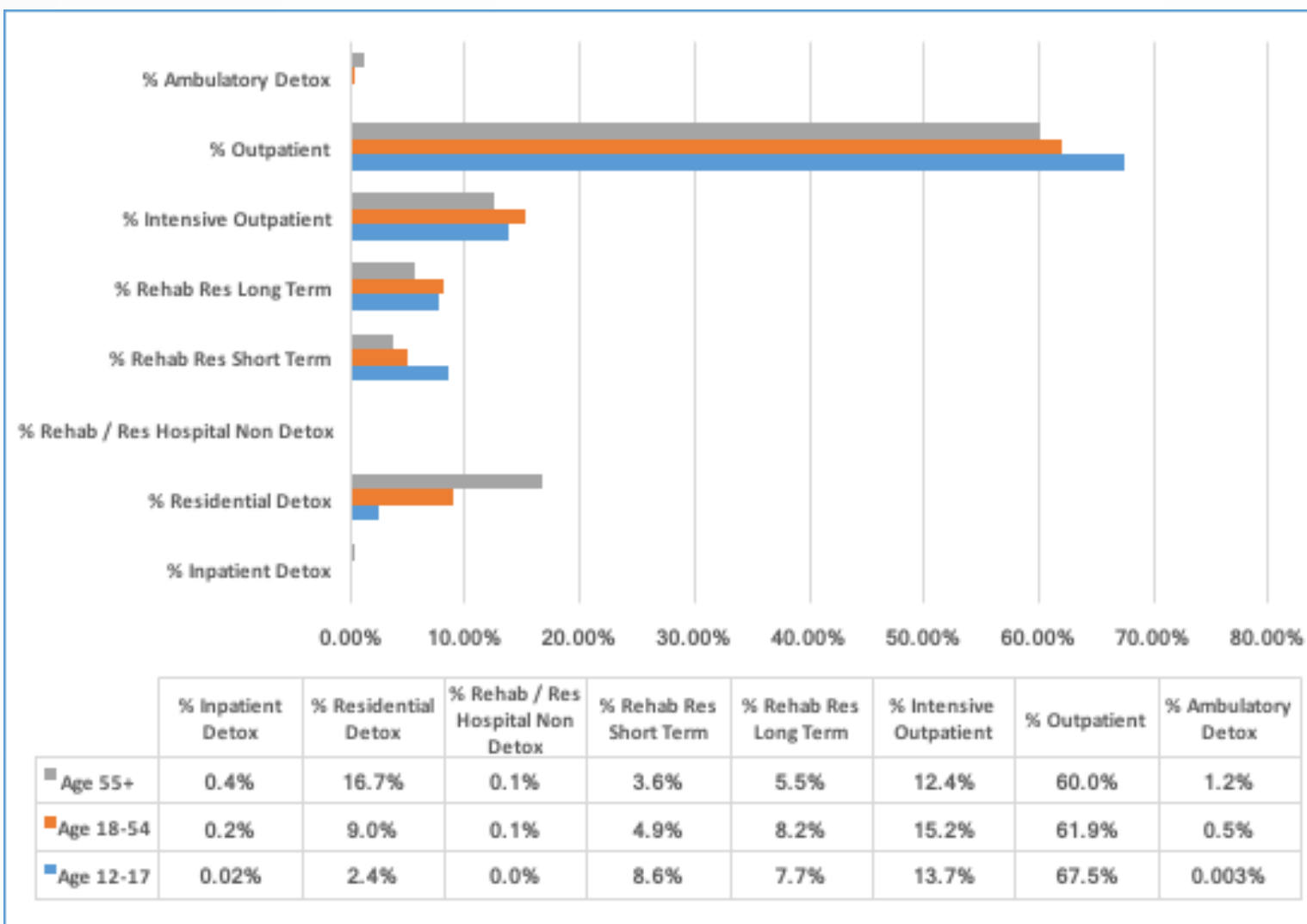
- The graph depicts the percentage of patients in D&A treatment referred primarily by a court / legal system (TEDS-A 2014)
- Note that "Inpatient Detox" refers only to D&A Facilities, not all Community Hospitals
- <u>Relatively few D&A agencies report patients in detox referred by the legal system</u>

Detailed Arrests & Detox Services Estimates in Mat Su / Anchorage for Adolescents

Year	Mat Su Anchorage Age 12-17 Population	Estimated Region Arrests (a)	3.4% of Arrestees Inpatient Detox (b)	Inpatient Lenth of Stay	Inpatient Detox Days	Inpatient Detox Beds @ 80% Occ	4.6% % of Arrestees Residential Detox	Residential Detox Length of Stay	Residential Detox Days	Residential Detox Beds @ 80% Occ	7.3% of Arrestees Ambulatory Detox	Ambulatory Detox Averge Number of Visits per Admission	Ambulatory Visits Per Year	Ambulatory Visits Per Work Day
2015	32,428	993	34	18	604	2	46	14	622	2	72	8	556	2
2020	35,199	1,078	37	18	656	2	50	14	675	2	79	8	603	2
2025	36,700	1,124	38	18	684	2	52	14	704	2	82	8	629	3
2030	37,978	1,163	40	18	708	2	53	14	729	2	85	8	651	3
2035	39,446	1,208	41	18	735	3	56	14	757	3	88	8	676	3
2040	40,214	1,231	42	18	749	3	57	14	771	3	90	8	689	3
2045	41,279	1,264	43	18	769	3	58	14	792	3	92	8	707	3

(a) FBI UCR 2014, rate per 10,000
(b) D&A Inpatient Facility – TEDs data
(c) TEDS-D, 2013; see also detox by service type methodology

schafer consulting

Detailed Arrests & Detox Services Estimates in Mat Su / Anchorage for Adults

Year	Mat Su Anchorage Age 18-54 Population	Estimated Region Arrests (a)	3.4% of Arrestees Inpatient Detox (b)	Inpatient Lenth of Stay	Inpatient Detox Days	Inpatient Detox Beds @ 80% Occ	4.6% % of Arrestees Residential Detox	Residential Detox Length of Stay	Residential Detox Days	Residential Detox Beds @ 80% Occ	7.3% of Arrestees Ambulatory Detox	Ambulatory Detox Averge Number of Visits per Admission	Ambulatory Visits Per Year	Ambulatory Visits Per Work Day
2015	207,747	9,778	352	10	3,384	12	479	7	3,344	11	763	23	17,243	69
2020	211,453	9,952	358	10	3,444	12	488	7	3,404	12	776	23	17,551	70
2025	221,907	10,444	376	10	3,615	12	512	7	3,572	12	815	23	18,418	74
2030	234,315	11,028	397	10	3,817	13	540	7	3,772	13	860	23	19,448	78
2035	245,398	11,550	416	10	3,997	14	566	7	3,950	14	901	23	20,368	82
2040	251,887	11,855	427	10	4,103	14	581	7	4,055	14	925	23	20,907	84
2045	257,488	12,119	436	10	4,194	14	594	7	4,145	14	945	23	21,372	86

(a) FBI UCR 2014, rate per 10,000
(b) D&A Inpatient Facility – TEDs data
(c) TEDS-D, 2013; see also detox by service type methodology

schafer
consulting

Detailed Arrests & Detox Services Estimates in Mat Su / Anchorage for Older Adults

Year	Mat Su Anchorage Age 55+ Population	Estimated Region Arrests (a)	3.4% of Arrestees Inpatient Detox (b)	Inpatient Lenth of Stay	Inpatient Detox Days	Inpatient Detox Beds @ 80% Occ	4.6% % of Arrestees Residential Detox	Residential Detox Length of Stay	Residential Detox Days	Residential Detox Beds @ 80% Occ	7.3% of Arrestees Ambulatory Detox	Ambulatory Detox Averge Number of Visits per Admission	Ambulatory Visits Per Year	Ambulatory Visits Per Work Day
2015	89,520	521	18	10	175	1	24	7	171	1	39	17	668	3
2020	104,012	605	21	10	204	1	28	7	198	1	45	17	776	3
2025	112,142	652	23	10	219	1	31	7	214	1	49	17	837	3
2030	117,415	683	24	10	230	1	32	7	224	1	51	17	876	4
2035	122,308	711	25	10	239	1	33	7	233	1	53	17	913	4
2040	130,610	760	27	10	256	1	36	7	249	1	57	17	975	4
2045	138,370	805	28	10	271	1	38	7	264	1	60	17	1,032	4

(a) FBI UCR 2014, rate per 10,000
(b) D&A Inpatient Facility – TEDs data
(c) TEDS-D, 2013; see also detox by service type methodology

schafer consulting

Substance Abuse Treatment Service Array

Service Continuum in Mat Su and Anchorage Compared to the National Array of Substance Abuse Treatment Services

schafer
consulting

Summary: Substance Abuse Treatment Service Array

- The distribution of treatment services available in the Mat Su and Anchorage areas is not consistent with an optimal array

- In particular, the following services are not present or only minimally available:

    1) Inpatient Hospital Detox

    2) Rehabilitation / Residential, Hospital Non Detox

    3) Rehabilitation / Residential, Short Term (30 days or fewer)

    4) Ambulatory Detox

schafer
consulting

Substance Abuse Treatment 2014 Admissions for Mat Su and Anchorage by Service Type

Age Groups	Missing	Residential Detox	Rehab/Res, Long Term (More than 30 Days)	Ambulatyory, Intensive Outpatient	Amnbulatory, Non Intensive Outpatient	Total
Age 12-17	0	0	40	19	56	115
Age 18-54	3	406	305	345	382	1,441
Age 55+	0	60	7	21	24	112
Total	3	466	352	385	462	1,668

Actual Admissions

Substance Abuse Treatment Services with No Admissions in 2014 for Mat Su or Anchorage Residents:
- Inpatient Hospital Detox
- Rehab / Residential / Hospital Non Detox
- Rehab / Residential, Short Term (30 Days or Fewer)
- Ambulatory Detox

schafer
consulting

Service	National Admissions	National Percent	Mat Su / Anchorage Admissions	Mat Su / Anchorage Percent	Major Service Gaps
Inpatient Hospital Detox	49,879	3.1%	0	0%	←
Residential Detox	310,124	19.2%	466	28%	
Rehab/Res, Hospital Non Detox	4,097	0.3%	0	0%	←
Rehab/Res, Short Term Under 30 Days	150,488	9.3%	0	0%	←
Rehab/Res, Long Term Over 30 Days	116,612	7.2%	352	21%	
Ambulatory, Intensive Outpatient	187,817	11.6%	385	23%	
Ambulatory, Non-Intensive Outpatient	777,138	48.1%	462	28%	
Ambulatory Detox	17,935	1.1%	0	0%	←
Total (excluding Missing records)	**1,614,090**	**100%**	**1,668**	**100%**	

schafer consulting

Matanuska-Susitna / Anchorage Core Based Statistical Area (CBSA) Substance Abuse Treatment, Client Characteristics

Previous Treatment Episodes, Primary Substance Problem, Psychiatric Problem in Addition to Substance Abuse, Veterans, Living Arrangement, Number of Arrests in Prior 30 Days, Employment Status, Insurance, Primary Source of Payment, Health Insurance, Principal Source of Income

schafer
consulting

Client Characteristics Summary

- The following section identifies the number and percentage of clients from Mat Su and Anchorage in various domains pertinent to planning Detox and other other Substance Abuse Treatment services for the regions

- National percentages are also shown in each domain to provide a comparison and context for the unique characteristics and needs of the regions

- Data is not available separately for Mat Su and Anchorage

schafer
consulting

Prior Substance Abuse Treatment Episodes Mat Su Borough and Anchorage Residents, 2014

Number of Prior Treatment Episodes	Total	Percent
Missing data	9	1%
No Prior Treatment Episodes	660	40%
1 Prior Treatment Episode	456	27%
2 Prior Treatment Episodes	236	14%
3 Prior Treatment Episodes	122	7%
4 Prior Treatment Episodes	70	4%
5 or More Prior Treatment Episodes	116	7%
Total	1669	100%

- 40% had no prior treatment
- 27% one prior treatment episode
- 14% two prior treatment episodes

schafer
consulting

Primary Substance Abuse Problem Mat Su Borough and Anchorage Residents, 2014

Primary Substance Abuse Problem	Total	Percent	National
Alcohol	909	54%	36.2%
Heroin	279	17%	22.1%
Marijuana/Hashish	174	10%	15.3%
Other Opiates and Synthetics	111	7%	7.9%
Methamphetamine	109	7%	8.4%
Cocaine/Crack	34	2%	5.4%
Other Amphetamines	30	2%	0.1%
Other	9	0%	0.4%
Missing	7	0%	0.7%
Benzodiazepines	4	0%	0.9%
Other Hallucinogens	2	0%	0.1%
PCP	1	0%	0.3%
Total Admissions	**1,669**	**100%**	**97.8%**

- Over half of all admissions to Substance Abuse Treatment services for residents of Mat Su and Anchorage were for **Alcohol**

schafer
consulting

Psychiatric Diagnosis in Addition to Substance Abuse Problem, Mat Su Borough and Anchorage Residents, 2014

- 45% of those from Mat Su and Anchorage entering a Substance Abuse treatment program also reported a Psychiatric problem
- Nationally, 26% reported a Psychiatric Problem in addition to an Alcohol/Drug problem

Response	Number	Percent
No	903	54%
Yes	750	45%
Missing	16	1%
Total	1,669	100%

Services that address co-occuring Substance Abuse and Mental Health are important to include in the regions delivery system

schafer
consulting

Anchorage and Mat Su Veterans in Substance Abuse Treatment Care, 2014

- Relatively few veterans received substance abuse treatment in 2014
- This is consistent with the national percentage of veterans who received treatment in 2014 which was also 3%

Response	Number	Percent
No	1,576	94%
Missing	51	3%
Yes	42	3%
Total	1,669	100%

schafer
consulting

Living Arrangements for Anchorage and Mat Su Residents in Substance Abuse Treatment Care, 2014

Living Arrangement	Number	Percent	National Percent
Missing	36	2%	2%
Homeless	311	19%	15%
Dependent Living	428	26%	19%
Independent Living	894	54%	65%
Total	1,669	100%	100%

- The majority of those from Mat Su and Anchorage who received Substance Abuse Treatment lived on their own @ 54%
- A little over 300 admissions were from those who were homeless, an important metric to consider in system improvement planning

schafer
consulting

Number of Arrests in 30 Days Prior to Admission, Mat Su and Anchorage Residents 2014

- The percentages of Mat Su and Anchorage residents who entered Substance Abuse Treatment in 2014 with <u>no prior </u>30 day arrests was higher than the national average
- Similar to the National average, comparatively few entering treatment had one or more prior arrests

Prior Arrests	Number	Percent	National Percent
Missing	7	0%	7%
None	1,546	93%	85%
Once	110	7%	7%
2 or More	6	0%	1%
Total	1,669	100%	100%

schafer consulting

Employment Status, Mat Su Borough and Anchorage Residents in Substance Abuse Treatment, 2014

Employment Status	Number	Percent	National Percent
Not in Labor Force	721	43%	37%
Unemployed	557	33%	38%
Full Time	233	14%	16%
Part Time	141	8%	8%
Missing	18	1%	1%
Total	1,669	100%	100%

- 6% more Mat Su and Anchorage residents were Not in the Labor Force compared to the national percentage of 37%
- **76%** of those entering Substance Abuse Treatment from Mat Su and Anchorage were not employed

- Definitions
  - "Not in Labor Force" = Not looking for work in the past 30 days or a student, homemaker, disabled, retired, or an inmate of an institution
  - "Unemployed" = Looking for work during the past 30 days or on layoff from a job

schafer consulting

Primary Source of Payment for Substance Abuse Treatment, Mat Su Borough and Anchorage Residents, 2014

Source of Payment in 2014	Number	Percent	National Percent	
Self Pay	488	29%	4.1%	←
Other Government Payments	374	22%	14.4%	
Other	313	19%	3.2%	←
Medicaid	310	19%	7.6%	←
BC/BS, Other Health Insurance Company	123	7%	1.8%	←
Missing	45	3%	67%	
No Charge (Free, Charity, Special Research, Teaching)	11	1%	1.6%	
Medicare, Worker's Compensation	5	0%	0.3%	
Total	1,669	100%	100%	

- There are significant differences in the source of payment for treatment between those entering care from Mat Su and Anchorage and the rest of the country, especially:
- Much higher Self Pay, Medicaid, Other, and BC/BS or Other Health Insurance Company for residents from Mat Su and Anchorage

schafer
consulting

Health Insurance for Substance Abuse Treatment, Mat Su Borough and Anchorage Residents, 2014

Health Insurance	Number	Percent	National Percent
None	714	43%	19%
Medicare, Other (e.g. Tricare, CHAMPUS)	421	25%	5%
Medicaid	363	22%	11%
Private Ins, BC/BS, HMO	87	5%	7%
Missing	84	5%	58%
Total	1,669	100%	100%

- This specifies the client's health insurance, if any. This may or may not pay for alcohol or drug treatment
- 43% of those entering Substance Abuse Treatment from Mat Su and Anchorage had no health insurance compared to 19% nationally
- The percentage of Mat Su and Anchorage residents entering treatment with Medicare, Other (e.g. Tricare, Champus) was 5 times higher than the national percent
- And the percentage of Mat Su and Anchorage residents with Medicaid was twice as high as the nation as a whole

schafer consulting

Principal Source of Income for Residents Receiving Substance Abuse Treatment, Mat Su Borough and Anchorage, 2014

Principal Source of Income	Number	Percent	National Percent
None	527	32%	23%
Other	419	25%	12%
Wages/Salary	386	23%	18%
Retirement/Pension	169	10%	4%
Public Assistance	144	9%	6%
Missing	24	1%	38%
Total	1,669	100%	100%

- The client's principal source of financial source at admission
- Clients receiving treatment from Mat Su and Anchorage reported a 9% higher rate of no principal source of income and
- Over twice the percentage indicating "Other" and "Retirement/Pension" as their source of income

schafer consulting

Appendix

Detailed Methodologies and Tables

Detox Agencies Survey

Online Survey of Four Agencies Providing Detox Services in Alaska

schafer
consulting

Detox Agencies Survey

- We conducted an online survey of four agencies providing detox services in Alaska identified by the Mat Su Health Foundation

- The survey was conducted to provide information specific to Alaska and the provision / need for Inpatient Hospital, Residential, and Ambulatory detox services

- Respondent identities and agencies were kept anonymous to encourage disclosure of information

- The information is helpful in adjusting national utilization data to the Mat Su / Anchorage region

schafer
consulting

Detox Survey Responses

- All four agencies provide both drug and alcohol treatment, one only provides Ambulatory Detox, and three provide Residential detox services

- All four serve adults and older adults, one serves children/adolescents

- Three agencies provide services for active duty military,

Answer Options	Response Count
Hospital Inpatient Detox	0
Residential Detox	3
Ambulatory Detox	1
	4
Other (please specify):	
Social Detox,	1
Medical detox	2

- None of the four provider agencies indicated that they offer Hospital Inpatient Detox, however one respondent, in a subsequent question, indicated they use a Community hospital when necessary
- One offered Social Detox and two offered Medical Detox

schafer
consulting

Detox Survey Responses

- Waiting List:
  - We have about a 3 week wait, this is currently due to a shortage of admission staff.
  - We only provides detox services to patients admitted to our residential program. Under supervision of the medical staff, if needed a person will be transferred to the hospital for severe withdrawal management
  - One or two weeks and only periodically
  - Because of staffing shortages you may have to wait approximately ten hours for a bed

schafer consulting

Detox Survey Responses

- When your Detox Program is full / wait List too long, what other agency do you refer patients to for detox services?

Answer Options	Response Count
Hospital Inpatient Detox	2
Residential Detox	1
Ambulatory Detox	2
Other	2

- Hospital Inpatient Detox = in a Community Hospital
- Other:
  - Primary Doctor
  - Try to keep the person engaged until an opening

schafer
consulting

Detox Survey Responses

Prioritizing Patients to Detox Service:

- First come, first serve – 2 responses
- Medical acuity – 1 response
- Patients from our region – 0 responses
- Other Responses:
  - The State requires we prioritize pregnant women and IV drug users
  - We only provide detox services to patients admitted to our residential program

schafer
consulting

Detox Survey Responses

- How many admissions over the past 12 months?
  - There was one response for "Residential Detox", "approximately 350" and "this is low due to a lack of admission RN"
  - And one response for "Other", "Social Detox, about 50"

- What is your average occupancy?
  - Inpatient Hospital Detox – no response
  - Residential Detox – one response, "about 79% due to a shortage of admission staff"
  - Ambulatory Detox – 87%
  - Other – "8-10 daily census /16 bed capacity" = 50% - 63%

schafer
consulting

Detox Survey Responses

- What is average length of stay?
  - Hospital Inpatient, no responses
  - Residential Detox, one response – 4-7 days
  - "Detox and Rehab combined approximately 30 days", one response
  - "Other":
    - "Social 7-14 days"
    - "3 day alcohol 10 day opioids"
- What percentage of your detox admissions come from outside the county/region in which your program is located?
  - Two responses indicate 30%
  - One response indicates 15%

schafer consulting

Detox Survey Responses

- What is the Payer Mix Percentage for your detox services?

Respondent	Medicaid	Medicare	BC/BS, Commercial (e.g. Aetna, Cigna)	Self Pay	Other Government / State Funding	No Charge (Free, Charity, etc.)	Other
Respondent A	*	*	*	*	100%	100%	*
Respondent B	65%	0%	10%	20%	*	5%	*

schafer
consulting

Detox Survey Responses

- What is the average reimbursement per patient day or per outpatient visit for your detox service?

  - One response: "The state finds a medical bed at about $365 per bed per day and a social per day perr (*sic*) bed at about $265 a day"

- What is the average operating cost per patient day or per outpatient visit for your detox service?

  - One response: "about $580 a day per bed to provide this service"

Inpatient Hospital Detox Demand Detailed Methodology

Mat Su Borough and Anchorage, Based on Utilization Rates by Age Groups and Average Daily Occupancy at 80%

schafer
consulting

Inpatient Hospital Detox Bed Demand Detailed Methodology

- The table below depicts the data and assumptions used to determine the national rate of admissions and patient days per 10,000 US Resident Population. The admission rates and median lengths of stay are derived from the Treatment Episode Data Set (TEDS) Admissions and TEDS Discharges Public Use Files. The rates are applied to the Mat Su and Anchorage populations by age groups.

- In addition to the TEDS data, national Community Hospital utilization is also factored into the need for Inpatient Hospital Detox services; these metrics are from the Healthcare Cost and Utilization Project Statistical, Nationwide Inpatient Sample, 2014

- Projections are made for both the General Population and those arrested

Inpatient Hospital Detox Detailed Methodology

Age Group	Age 12-17	Age 18-54	Age 55+	Total
US 2014 Resident Population	24,995,419	159,030,365	86,277,855	270,303,639
National Inpatient Drug & Alcohol Facilities TEDs 2014 Detox Data				
Admissions:				
1, National Hospital Inpatient Detox Admissions (D&A Funded) TEDS A	199	41,925	7,755	49,879
2. Factor in Hospitalizations for Opioid Increase 5% *	10	2,096	388	2,494
Total National Hospital Inpatient Detox Admissions, Sum 1 & 2	**209**	**44,021**	**8,143**	**52,373**
Patient Days:				
1. National Hospital Inpatient Detox Median Length of Stay LOS TEDS 2013 D	8	5	5	5
2. Add Hospital Inpatient Detox Days Waiting for Treatment TEDS A	10	4	2	4
Total National Hospital Inpatient Median LOS & Days Waiting, Sum 1 & 2	18	10	6	9
Total Patient Days	**3,740**	**423,215**	**50,674**	**480,139**
Patient Days Rate Per !0,000 Non Institutional Resident Population:				
1. National Hospital Inpatient Detox AdmissionsTEDS A per 10,000	1.5	26.6	5.9	17.8
2. Add Actual Drug Alcohol Deaths per 10,000**	0.3	1.8	1.6	1.7
Total National Hospital Inpatient Detox Days per 10,000 (Sum 1 & 2)	**1.8**	**28.4**	**7.5**	**19.5**
Inpatient General Community Hospitals 2014 Detox Procedures				
1. National Community Hospital Detox Procedures Admissions	295	263,320	19,895	283,510
2. National Community Hospital Detox Procedures LOS	3.0	4.6	5.3	4.8
3. National Community Hospital Detox Procedures Patient Days	884	1,206,883	105,444	1,357,861
4. National Community Hospital Detox Days per 100,000	3.5	758.9	122.2	502.3
National Community Hospital Detox Days per 10,000	**0.35**	**76**	**12**	**50**
Combined D&A Inpatient Facility & Community Hospital Days per 10,000	**2**	**104**	**20**	**70**

D&A Facility Inpatient Detox Bed Demand Rates Applied to **Mat Su Borough** Population Age Groups

Region	Year	Age Group	Population	Patient Days Per 10,000	Patient Days	Beds @ 80% Occ.
Mat Su	Yr 2015	Age 12-17	8,983	1.8	2	0
		Age 18-54	48,473	28.4	138	0
		Age 55+	23,763	7.5	18	0
		Ages 12+	81,219	19.5	158	1
	Yr 2020	Age 12-17	10,484	1.8	2	0
		Age 18-54	53,737	28.4	153	1
		Age 55+	28,686	7.5	21	0
		Ages 12+	92,907	19.5	181	1
	Yr 2025	Age 12-17	11,462	1.8	2	0
		Age 18-54	60,869	28.4	173	1
		Age 55+	32,322	7.5	24	0
		Ages 12+	104,653	19.5	204	1
	Yr 2030	Age 12-17	12,031	1.8	2	0
		Age 18-54	68,649	28.4	195	1
		Age 55+	35,398	7.5	26	0
		Ages 12+	116,077	19.5	226	1
	Yr 2035	Age 12-17	13,127	1.8	2	0
		Age 18-54	75,702	28.4	215	1
		Age 55+	38,543	7.5	29	0
		Ages 12+	127,372	19.5	248	1
	Yr 2040	Age 12-17	14,547	1.8	3	0
		Age 18-54	81,887	28.4	233	1
		Age 55+	42,280	7.5	32	0
		Ages 12+	138,714	19.5	270	1
	Yr 2045	Age 12-17	15,970	1.8	3	0
		Age 18-54	88,593	28.4	252	1
		Age 55+	45,409	7.5	34	0
		Ages 12+	149,972	19.5	292	1

D&A Facility Inpatient Detox Bed Demand Rates Applied to **Anchorage** Population Age Groups

Region	Year	Age Group	Population	Patient Days Per 10,000	Patient Days	Beds @ 80% Occ.
Anchorage	Yr 2015	Age 12-17	23,446	1.8	4	0
		Age 18-54	159,274	28.4	453	2
		Age 55+	65,757	7.5	49	0
		Ages 12+	248,477	19.5	484	2
	Yr 2020	Age 12-17	24,715	1.8	4	0
		Age 18-54	157,716	28.4	448	2
		Age 55+	75,326	7.5	56	0
		Ages 12+	257,757	19.5	502	2
	Yr 2025	Age 12-17	25,237	1.8	4	0
		Age 18-54	161,038	28.4	458	2
		Age 55+	79,820	7.5	60	0
		Ages 12+	266,096	19.5	518	2
	Yr 2030	Age 12-17	25,947	1.8	5	0
		Age 18-54	165,666	28.4	471	2
		Age 55+	82,017	7.5	61	0
		Ages 12+	273,630	19.5	533	2
	Yr 2035	Age 12-17	26,319	1.8	5	0
		Age 18-54	169,696	28.4	482	2
		Age 55+	83,765	7.5	63	0
		Ages 12+	279,780	19.5	545	2
	Yr 2040	Age 12-17	25,667	1.8	5	0
		Age 18-54	169,999	28.4	483	2
		Age 55+	88,330	7.5	66	0
		Ages 12+	283,997	19.5	553	2
	Yr 2045	Age 12-17	25,309	1.8	4	0
		Age 18-54	168,895	28.4	480	2
		Age 55+	92,961	7.5	69	0
		Ages 12+	287,166	19.5	559	2

Community Hospital
Detox Bed Demand for
Mat Su by Age Groups

Region	Year	Age Group	Population	Patient Days Per 10,000	Patient Days	Beds @ 80% Occ.
Mat Su	Yr 2015	Age 12-17	8,983	0.4	0	0
		Age 18-54	48,473	76	368	1
		Age 55+	23,763	12	29	0
		Ages 12+	81,219	50	408	1
	Yr 2020	Age 12-17	10,484	0.4	0	0
		Age 18-54	53,737	76	408	1
		Age 55+	28,686	12	35	0
		Ages 12+	92,907	50	467	2
	Yr 2025	Age 12-17	11,462	0.4	0	0
		Age 18-54	60,869	76	462	2
		Age 55+	32,322	12	40	0
		Ages 12+	104,653	50	526	2
	Yr 2030	Age 12-17	12,031	0.4	0	0
		Age 18-54	68,649	76	521	2
		Age 55+	35,398	12	43	0
		Ages 12+	116,077	50	583	2
	Yr 2035	Age 12-17	13,127	0.4	0	0
		Age 18-54	75,702	76	575	2
		Age 55+	38,543	12	47	0
		Ages 12+	127,372	50	640	2
	Yr 2040	Age 12-17	14,547	0.4	1	0
		Age 18-54	81,887	76	621	2
		Age 55+	42,280	12	52	0
		Ages 12+	138,714	50	697	2
	Yr 2045	Age 12-17	15,970	0.4	1	0
		Age 18-54	88,593	76	672	2
		Age 55+	45,409	12	55	0
		Ages 12+	149,972	50	753	3

Community Hospital Detox Bed Demand for **Anchorage** by Age Groups

Region	Year	Age Group	Population	Patient Days Per 10,000	Patient Days	Beds @ 80% Occ.
Anchorage	Yr 2015	Age 12-17	23,446	0.4	1	0
		Age 18-54	159,274	76	1,209	4
		Age 55+	65,757	12	80	0
		Ages 12+	248,477	50	1,248	4
	Yr 2020	Age 12-17	24,715	0.4	1	0
		Age 18-54	157,716	76	1,197	4
		Age 55+	75,326	12	92	0
		Ages 12+	257,757	50	1,295	4
	Yr 2025	Age 12-17	25,237	0.4	1	0
		Age 18-54	161,038	76	1,222	4
		Age 55+	79,820	12	98	0
		Ages 12+	266,096	50	1,337	5
	Yr 2030	Age 12-17	25,947	0.4	1	0
		Age 18-54	165,666	76	1,257	4
		Age 55+	82,017	12	100	0
		Ages 12+	273,630	50	1,375	5
	Yr 2035	Age 12-17	26,319	0.4	1	0
		Age 18-54	169,696	76	1,288	4
		Age 55+	83,765	12	102	0
		Ages 12+	279,780	50	1,405	5
	Yr 2040	Age 12-17	25,667	0.4	1	0
		Age 18-54	169,999	76	1,290	4
		Age 55+	88,330	12	108	0
		Ages 12+	283,997	50	1,427	5
	Yr 2045	Age 12-17	25,309	0.4	1	0
		Age 18-54	168,895	76	1,282	4
		Age 55+	92,961	12	114	0
		Ages 12+	287,166	50	1,443	5

Residential Detox Demand Detailed Methodology

Mat Su Borough and Anchorage, Based on Utilization Rates by Age Groups and Average Daily Occupancy at 80%

schafer
consulting

Residential Detox Bed Demand Detailed Methodology

- The table below depicts the process used to determine the national rate of admissions and patient days per 10,000 US Resident Population.

- The admission rates and median lengths of stay are derived from the TEDS-A and TEDS-D Public Use Files. The rates are applied to the Mat Su and Anchorage populations by age groups.

- Projections are made using TEDs data for both the General Population and those arrested

Residential Detox Detailed Demand

National Residential Drug & Alcohol Facilities TEDs 2014 Detox Data				
Demand Factor	Age 12-17	Age 18-54	Age 55+	Total
1. Detox RTC Admissions	1,828	276,715	31,581	310,124
2. Detox RTC Admissions per 10,000	**0.7**	**17.4**	**3.7**	**11.5**
3. Detox RTC Median LOS	12.9	5.3	5.2	5.3
4. Detox RTC Days Waiting for Treatment	1	2	1	2
5. Sum RTC Detox Median LOS + Days Waiting for Treatmen	14	7	6	7
6. Detox RTC Patient Days	24,894	1,931,488	196,743	2,148,207
Detox RTC Patient Days per 100,000	100	1,215	228	795
Detox RTC Patient Days per 10,000	**10.0**	**121**	**23**	**79**

Residential Detox Detailed Statistical Demand for **Mat Su** by Age Group

Region	Year	Age Group	Population	Patient Days per 10,000	Region Patient Days	Beds @ 80% Occ.
Mat Su	Yr 2015	Age 12-17	8,983	10	9	0
		Age 18-54	48,473	121	589	2
		Age 55+	23,763	23	54	0
		Ages 12+	81,219	79	645	2
	Yr 2020	Age 12-17	10,484	10	10	0
		Age 18-54	53,737	121	653	2
		Age 55+	28,686	23	65	0
		Total	92,907	79	738	3
	Yr 2025	Age 12-17	11,462	10	11	0
		Age 18-54	60,869	121	739	3
		Age 55+	32,322	23	74	0
		Ages 12+	104,653	79	832	3
	Yr 2030	Age 12-17	12,031	10	12	0
		Age 18-54	68,649	121	834	3
		Age 55+	35,398	23	81	0
		Ages 12+	116,077	79	923	3
	Yr 2035	Age 12-17	13,127	10	13	0
		Age 18-54	75,702	121	919	3
		Age 55+	38,543	23	88	0
		Ages 12+	127,372	79	1,012	3
	Yr 2040	Age 12-17	14,547	10	14	0
		Age 18-54	81,887	121	995	3
		Age 55+	42,280	23	96	0
		Ages 12+	138,714	79	1,102	4
	Yr 2045	Age 12-17	15,970	10	16	0
		Age 18-54	88,593	121	1,076	4
		Age 55+	45,409	23	104	0
		Ages 12+	149,972	79	1,195	4

Residential Detox Detailed <u>Statistical</u> Demand for **Anchorage** by Age Group

Region	Year	Age Group	Population	Patient Days per 10,000	Region Patient Days	Beds @ 80% Occ.
Anchorage	Yr 2015	Age 12-17	23,446	10	23	0
		Age 18-54	159,274	121	1,934	7
		Age 55+	65,757	23	150	1
		Ages 12+	248,477	79	1,975	7
	Yr 2020	Age 12-17	24,715	10	25	0
		Age 18-54	157,716	121	1,916	7
		Age 55+	75,326	23	172	1
		Ages 12+	257,757	79	2,048	7
	Yr 2025	Age 12-17	25,237	10	25	0
		Age 18-54	161,038	121	1,956	7
		Age 55+	79,820	23	182	1
		Ages 12+	266,096	79	2,115	7
	Yr 2030	Age 12-17	25,947	10	26	0
		Age 18-54	165,666	121	2,012	7
		Age 55+	82,017	23	187	1
		Ages 12+	273,630	79	2,175	7
	Yr 2035	Age 12-17	26,319	10	26	0
		Age 18-54	169,696	121	2,061	7
		Age 55+	83,765	23	191	1
		Ages 12+	279,780	79	2,224	8
	Yr 2040	Age 12-17	25,667	10	26	0
		Age 18-54	169,999	121	2,065	7
		Age 55+	88,330	23	201	1
		Ages 12+	283,997	79	2,257	8
	Yr 2045	Age 12-17	25,309	10	25	0
		Age 18-54	168,895	121	2,051	7
		Age 55+	92,961	23	212	1
		Ages 12+	287,166	79	2,288	8

Ambulatory Detox Demand Detailed Methodology

Mat Su Borough and Anchorage, Based on Utilization Rates by Age Groups and 249 Work Days per Year

schafer
consulting

Ambulatory Detox Demand Detailed Methodology

- The table below depicts the process used to determine the national utilization rate of Ambulatory Detox visits per 10,000 US Resident Population. The admission rates and median lengths of stay are derived from the 2013 TEDS-A and 2013 TEDS-D Public Use Files. The rates are then applied to the Mat Su and Anchorage populations by age groups.
- Due to the growing Opioid Epidemic, and service capacity gap, a factor of 20% has been added to the rate of admissions for all age groups. In 2012, Alaska's total Opioid treatment capacity was at 100% (Source: National & State Treatment Need and Capacity for Opioid Agonist Medication Assisted Treatment, Jones et al, 2015)

National Ambulatory Detox National Admissions:	13	17,776	2,867	20,656
Ambulatory Detox Admissions per 10,000	0.005	1.119	0.341	0.771
Est.Opioid Agonist Medication Assisted Treatment Capacity Gap ***	20%	20%	20%	20%
Revised Ambulatory Detox Admissions per 10,000	0.006	1.343	0.409	0.925
National Ambulatory Detox LOS & Days Waiting for Tx:				
Ambulatory Detox Median LOS	6.0	16.2	16.0	16.0
Ambulatory Detox Days Waiting for Treatment	0.0	1.1	1.2	1.2
Total Days Waiting + LOS	6.0	17.3	17.2	17.2
Ambulatory Detiox Patient Visits per 10,000	0.04	19.3	5.9	13.3

schafer
consulting

Ambulatory Detox Utilization Rates Applied to **Mat Su Borough** Population by Age Groups

Region	Year	Age Group	Population	Visits per 10,000	Visits	Avg. Visits & Days Waiting	Total Visits	Visits per Work Day
Mat Su	Yr 2015	Age 12-17	8,983	0.006	0	6.0	0	0
		Age 18-54	48,473	1.343	7	17.3	113	0
		Age 55+	23,763	0.409	1	17.2	17	0
		Total	81,219				129	0.5
	Yr 2020	Age 12-17	10,484	0.006	0	6.0	0	0
		Age 18-54	53,737	1.343	7	17.3	125	1
		Age 55+	28,686	0.409	1	17.2	20	0
		Total	92,907				145	1
	Yr 2025	Age 12-17	11,462	0.006	0	6.0	0	0
		Age 18-54	60,869	1.343	8	17.3	141	1
		Age 55+	32,322	0.409	1	17.2	23	0
		Total	104,653				164	1
	Yr 2030	Age 12-17	12,031	0.006	0	6.0	0	0
		Age 18-54	68,649	1.343	9	17.3	159	1
		Age 55+	35,398	0.409	1	17.2	25	0
		Total	116,077				184	1
	Yr 2035	Age 12-17	13,127	0.006	0	6.0	0	0
		Age 18-54	75,702	1.343	10	17.3	176	1
		Age 55+	38,543	0.409	2	17.2	27	0
		Total	127,372				203	1
	Yr 2040	Age 12-17	14,547	0.006	0	6.0	0	0
		Age 18-54	81,887	1.343	11	17.3	190	1
		Age 55+	42,280	0.409	2	17.2	30	0
		Total	138,714				220	1
	Yr 2045	Age 12-17	15,970	0.006	0	6.0	0	0
		Age 18-54	88,593	1.343	12	17.3	206	1
		Age 55+	45,409	0.409	2	17.2	32	0
		Total	149,972				238	1

Ambulatory
Detox
Utilization
Rates Applied
to **Anchorage**
Population by
Age Groups

Region	Year	Age Group	Population	Admissions per 10,000	Visits	Avg. Visits & Days Waiting	Total Visits	Visits per Work Day
Anchorage	Yr 2015	Age 12-17	23,446	0.006	0	6.0	0	0
		Age 18-54	159,274	1.343	21	17.3	370	1
		Age 55+	65,757	0.409	3	17.2	46	0
		Total	248,477				416	2
	Yr 2020	Age 12-17	24,715	0.006	0	6.0	0	0
		Age 18-54	157,716	1.343	21	17.3	366	1
		Age 55+	75,326	0.409	3	17.2	53	0
		Total	257,757				419	2
	Yr 2025	Age 12-17	25,237	0.006	0	6.0	0	0
		Age 18-54	161,038	1.343	22	17.3	374	2
		Age 55+	79,820	0.409	3	17.2	56	0
		Total	266,096				430	2
	Yr 2030	Age 12-17	25,947	0.006	0	6.0	0	0
		Age 18-54	165,666	1.343	22	17.3	385	2
		Age 55+	82,017	0.409	3	17.2	58	0
		Total	273,630				443	2
	Yr 2035	Age 12-17	26,319	0.006	0	6.0	0	0
		Age 18-54	169,696	1.343	23	17.3	394	2
		Age 55+	83,765	0.409	3	17.2	59	0
		Total	279,780				453	2
	Yr 2040	Age 12-17	25,667	0.006	0	6.0	0	0
		Age 18-54	169,999	1.343	23	17.3	395	2
		Age 55+	88,330	0.409	4	17.2	62	0
		Total	283,997				457	2
	Yr 2045	Age 12-17	25,309	0.006	0	6.0	0	0
		Age 18-54	168,895	1.343	23	17.3	392	2
		Age 55+	92,961	0.409	4	17.2	66	0
		Total	287,166				458	2

End of Detox Demand Study for the Mat Su Health Foundation

Report researched, written and compiled by:

Steve Schafer, M. Div.

Neil Shapiro, MBA

Senior Partners

Schafer Consulting Inc.

Established 1993

www.schaferconsulting.com

schafer consulting