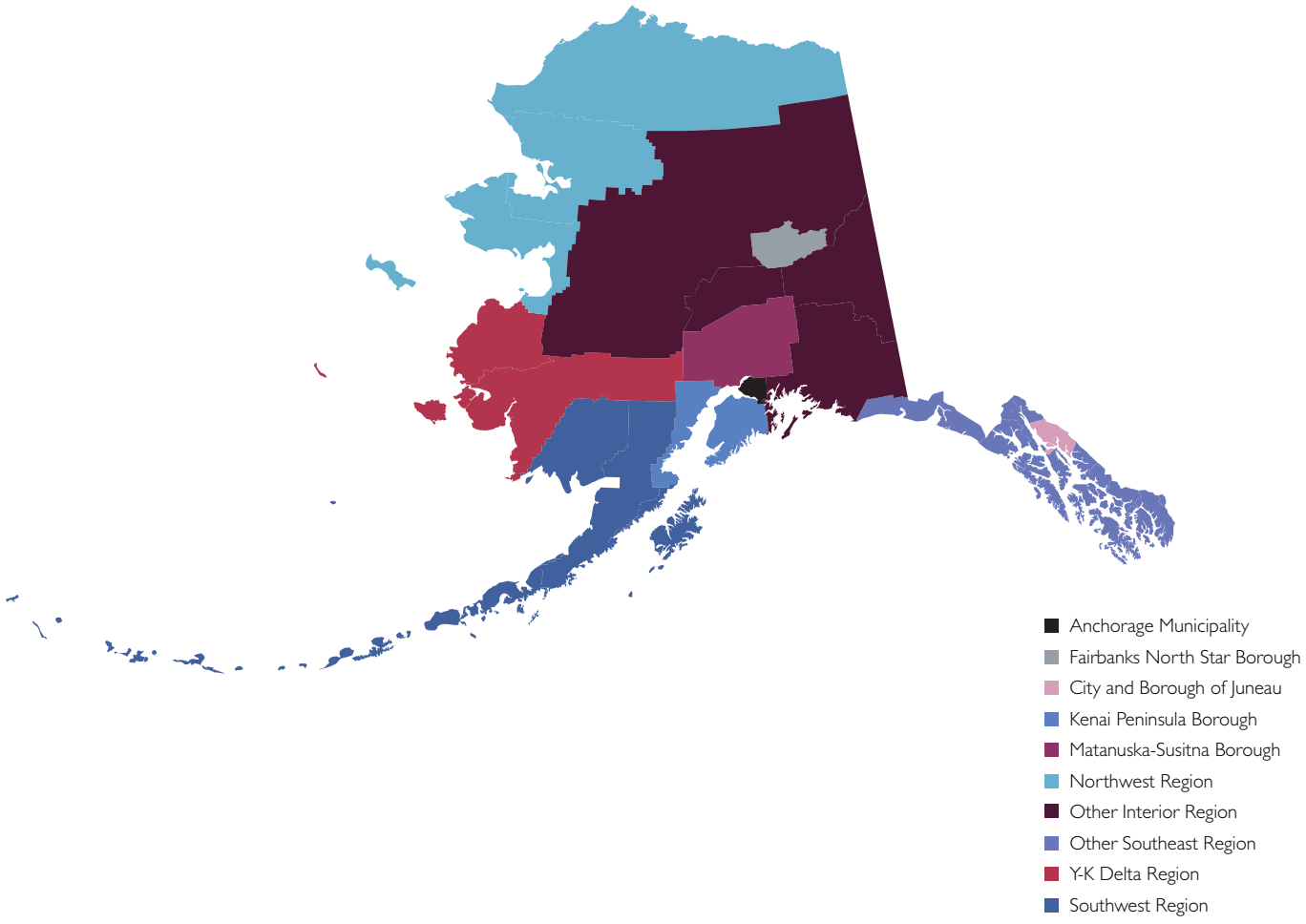
Alaska Behavioral Health Systems Assessment

UTILIZATION METHODOLOGY

January 22, 2016



Prepared for the Alaska Mental Health Trust Authority by
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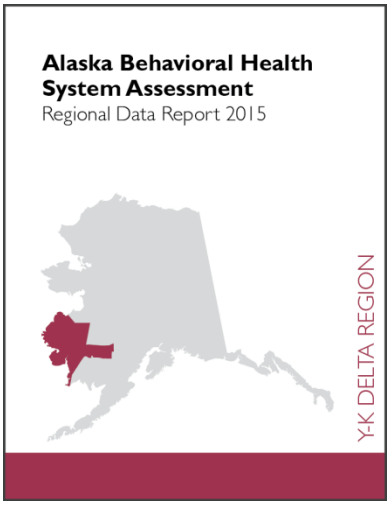
Trust
Alaska Mental Health Trust Authority

Alaska Behavioral Health Systems Assessment

Acknowledgements

Quantitative Data Support



This assessment and accompanying series of data reports are the product of many years of effort and would not have been possible without a small army of individuals. Agnew::Beck and Hornby Zeller Associates would like to express our gratitude to our data committee members, as well as the many staff from the Alaska Department of Health Social Services Division of Behavioral Health and Section of Chronic Disease and Health Promotion who helped inform and/or assisted with the production these reports. These individuals are listed below. Two individuals, in particular, dedicated tremendous time and energy to these efforts and we could not be more appreciative of their wisdom and constant support over the course of the past year plus. Thank you, Kathleen Carls and Michael Baldwin!

Data Committee Members

Name	Role	Organization
Kathleen Carls	Research Unit Manager Policy and Planning Section	State of Alaska Division of Behavioral Health
Mark Haines-Simeon	*Former* Policy & Planning Section Manager	State of Alaska Division of Behavioral Health
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We would also like to thank Bill Herman, Former Senior Program Officer at the Alaska Mental Health Trust Authority, who was instrumental in the early data planning phases of this project.

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We also received valuable input and insights from a number of DBH Program Staff throughout the course of this effort as we sought to make sense of the data and we are very grateful for the time and efforts of these individuals.

Alaska Behavioral Health Systems Assessment

Utilization Methodology

INTRODUCTION

The project team analyzed data from Alaska's various administrative systems to determine the services used, by whom, where and at what cost over between FY2009 and FY2013. Extracts of the following data sets were used:

- The Alaska Medicaid Management Information System (MMIS) Juneau Claims and Eligibility or "JUCE" database,
- Alaska's Automated Information Management System (AKAIMS), including data from agencies that submit data through an electronic data interface (EDI);
- Alaska Psychiatric Institute's (API) electronic health record system, Meditech and
- DBH's Designated Evaluation and Treatment (DET) Program database.

The Medicaid JUCE dataset included claims data for all individuals who received services from behavioral health specific provider types and for individuals who received services from other providers of behavioral health services and they had a primary or secondary behavioral health diagnosis. The DET dataset included only clients who received hospital services that were paid for by the Division of Behavioral Health (clients receiving only transport services were excluded). The API Meditech dataset included only partial data for 2009. All data was provided by the Alaska Department of Health and Social Services' Division of Behavioral Health (DBH).

This document provides a layperson's overview of the methodology used and quality assurance steps taken. Extensive supporting technical documentation was also created to provide DBH with the specifications necessary to replicate the quantitative analyses completed by Hornby Zeller Associates (HZA). A copy of the database described below was also provided to DBH upon project closeout.

METHODOLOGY AND DATA SOURCES

To facilitate analysis, HZA developed a Microsoft Access database capable of merging and de-duping the records from the sources listed above. A client table, facilities table and treatment encounter table were created. The team extracted client data from all datasets with the following variables: Last Name, First Name, Date of Birth, Social Security Number, Unique ID (a unique identifier found in each dataset), Race and Gender. These variables encompassed the client table. For each client a special identifier called the Dedupe ID was created that was an amalgam of the clients Last Name (first three letters), Social Security Number (last four digits), DOB (converted into a numeric value) and gender.

The facilities table included an agency and facility identifier which identified the service location of the facility and could be linked to the treatment encounter file. The facilities table included

information about the provider type and the Medicaid provider group, the servicing address and the town and the region where the service was being provided.

The treatment data set included the Dedupe ID, agency and facility ID, the Unique ID (a unique identifier found in each dataset), treatment start and end date, ICD-9 codes for two diagnoses, the procedure code, and information about the clients' home location. Datasets were linked together by common identifiers to produce the analysis output. Described below are the datasets from where evaluators extracted the treatment data.

AKAIMS/EDI

The merging of datasets began with a download of treatment data from AKAIMS and EDI. AKAIMS is a web-based application that allows for an examination of the behavioral health services history of clients of agencies with grants from the Division of Behavioral Health (DBH). Behavioral health provider grantees are required by the Division of Behavioral Health (DBH) to input client and basic clinical information into AKAIMS. Agencies that have their own electronic health records system and do not use AKAIMS submit the required minimum dataset via EDI.

AKAIMS/EDI encounter/service records were included in analyses if the Treatment Start Date entered in the encounter note was within the selected fiscal years of service (2009-2013). Records for the following agencies/programs were excluded from analyses: Alcohol Safety Action Program (ASAP), Therapeutic Courts, Fetal Alcohol Syndrome (FASD) program, Alaska Department of Corrections DOC's Short Term Substance Abuse Treatment (SSAT) Programs, Department of Motor Vehicles (DMV), and Private Providers. Analyses included programs with any modality type, programs that may or may not be expired and programs that include "Do Not Use" in the description (an expired/Do Not Use program simply means that the agency no longer enrolls clients in the program). Analyses also included clients that had an encounter note of "no show," however the number of clients that were a "no show" for an entire year and did not receive another service is relatively small (less than 100). Data elements used in analyses included the Treatment Start and End dates (from the encounter notes), the ICD_9 codes, procedure codes, and agency identifiers. This core set of client data formed the basis of all records included the merged and de-duped treatment database.

Data elements included in merged database:

Last Name	First Name	Date of Birth	Social Security Number	Unique ID	Race	Gender
Dedupe ID (created field)	Treatment Start and End Dates (from the Encounter Note)	ICD_9 Codes	Procedure Codes	Agency/Facility Identifier	Agency/Facility Service Location	Client Home Location

API and DET

Client data from API's Meditech dataset was added to the AKAIMS/EDI dataset. These data elements included client demographics as well as the clinical diagnoses and the start and end date of

their stay in API. The API Meditech dataset included only partial data for 2009. DET is a program supported by DBH that provides funding on a fee-for-service basis to local community hospitals and specialty hospitals and assists with the costs of transport services when needed. Only clients who received hospital services that were paid for by DBH were included in this analysis (transport only clients were excluded). DET funding covers psychiatric inpatient care to certain persons, enabling them to receive care close to home and family. This dataset was merged with AKAIMS/EDI and API and once merged, the data was de-duplicated. The resulting deduped dataset contained over 4.4 million records.

Medicaid Management Information System JUCE

The Medicaid JUCE dataset provided information about behavioral health services paid for by Medicaid. The Medicaid JUCE dataset included claims data for all individuals who received services from Behavioral Health-specific settings, as well as for individuals who received services from General settings if they had a primary or secondary behavioral health diagnosis. Claims data for Behavioral Health Specific settings and General Settings were merged across the five fiscal years. While all Behavioral Health-specific (BHS) claims were used in the analysis of utilization and provider tallies, claims for General (GEN) Settings were filtered by diagnosis code (Primary and/or Secondary Diagnosis Codes >=290 and <320) to exclude clients who did not have a behavioral health condition and were receiving a non-behavioral health service. Over 4.7 million records were found in MMIS, but after an internal de-duplication process within the JUCE dataset alone, the number of records to 4.2 million records.

The AKAIMS/EDI/API/DET dataset was then merged with the MMIS-JUCE dataset. AKAIMS records that were deemed to replicate a Medicaid record were removed during the merge process, since Medicaid records had generally more complete treatment information. The final merged and de-duped treatment dataset had over 6.9 million records.

Both the final merged and de-duped treatment dataset and the Medicaid-only dataset were used to produce a number of analysis tables.

Provider Location Regional Assignments Tables

A master table was created to assist with the Provider location regional breakdown of information for all relevant reports. Regional assignments were straightforward for Medicaid records, because the Service Location fields, which included the town, street address and zip code were available to make reporting region determinations for each record. One exception were Medicaid services billed on behalf of foster parents from across the state through the Office of Child Services in Juneau. To retain accuracy within the Medicaid dataset, clients are reflected in the City and Borough of Juneau Reporting Region and a footnote was included to indicate the volume of statewide OCS clients. Provider location regional assignments for non-Medicaid records in AKAIMS required a close review of the provider list. Initial assignments were made by the HZA team. Providers whose servicing location was in question were sent to DBH for review and assistance in region assignment. Two providers, AKEELA Inc. and Southcentral Foundation, had facilities in more than one region. Within AKAIMS, AKEELA Ketchikan (i.e., Gateway Center for Human Services) is tracked as a separate agency and is readily differentiated from AKEELA Anchorage; however, the services provided by AKEELA in the Mat-Su borough are not tracked as a separate agency from AKEELA Anchorage. Likewise, Southcentral Foundation's McGrath services are not tracked as a separate

agency from their Anchorage facility. In order to track these services at the facility level, a significant additional effort would have been required of the HZA team, and a decision was made to include these services in the region associated with the agency (i.e., Anchorage). Similarly, for the Medicaid claims data, services associated with the two Southcentral Foundation facilities and the two AKEELA facilities (i.e., Anchorage and Matsu) are assigned to the Anchorage region because the agencies do not have separate billing ids for each facility.

Associated Data Quality Assurance Steps

- DBH Review of Regional Assignments: The regional code assignments that were in question by the HZA team were shared and discussed with DBH. DBH feedback was provided via email and phone and was incorporated into the final regional assignment tables used.
- HZA Internal Review of Regional Code Tables: Because HZA used three different databases to perform the analyses associated with this project, a final check of each regional code table to ensure alignment and accuracy was performed prior to the final data run.

Methodology by Table

Listed below are the tables generated by the dataset and a brief description of the methodologies used to produce each table.

Total Number of Medicaid Behavioral Health Clients by Provider Type, 2009-2013 (State and Regional Reports)

To calculate total Medicaid clients by provider type, the records from JUCE were linked with provider location information, as well as with the ICD9 diagnosis codes. Client counts were de-duplicated per provider type at both the statewide and regional levels for each of the five years, 2009-2013. Clients were narrowed down to include only those who were treated by providers in the Behavioral Health category, i.e., those labeled "BH," and those listed under "General" who had an ICD9/Diagnosis Code between 290 and 320 as either the first or second diagnosis. In addition, three special groupings were created to aggregate all physicians (combining individual and group physicians), all psychologists (combining individual and group psychologists), and all DBH Treatment and Recovery Grantees, including Residential Care for Children and Youth facilities (Behavioral Rehabilitation Services). To calculate the total unique number of Medicaid clients, clients were de-duplicated within these groups, as well, to get the most accurate overall estimate. Due to complications with accurately separating the Residential Care for Children and Youth (RCCY) services from other DBH Treatment and Recovery services, the decision was made to keep these together as one provider type category, i.e.,"DBHTR (Including RCCY)".

Table 1 includes an overview of the provider type numbers, claims types and additional notes related to accurately capturing unique Medicaid counts.

Table 1. Medicaid Provider ID's, Provider Type Groupings, Claims Type, and Additional Notes			
Provider Type Category	**Provider Type Number**	**Claims Type**	**Additional Notes**
Private Acute Care Hospital	1	Institutional	
Tribal Acute Care Hospital	5	Institutional	
Other Inpatient Psychiatric Hospital	2	Institutional	
Alaska Psychiatric Institute (API)	3 (reassigned to 100)	Institutional	Required creating a new provider type to parse records from Other Inpatient Psychiatric (also Provider Type 3)
Residential Psychiatric Treatment Center (RPTC)	3	Institutional	
Private Outpatient Hospital*	4	Institutional	
Tribal Outpatient Hospital*	7	Institutional	
All DBH Treatment and Recovery Providers, including RCCY**	Day Treatment Facility (10) Alcohol and Drug Abuse Centers (36) Community Behavioral Health Centers (93-69) Residential Care for Children and Youth (RCCY/BRS; 34)	Professional	Challenges accurately parsing out RCCY records because of service patterns prompted DBH to guide the team to consolidate RCCY in the DBHTR grouping. Accurately identifying Community Behavioral Health Center clients requires pulling the provider ID (93) and the specialty code (69) and ensuring that specialty code 99 clients are excluded.
Psychologists+	Psychologists – Individual (92) Psychologists – Group (91)	Professional	
Mental Health Physician's Clinic	93-99	Professional	
Tribal Health Clinic	8	Professional	
Rural Health Clinic	51	Professional	
Physicians++	Physicians – Individual (20) Physicians – Group (21)	Professional	
Advanced Nurse Practitioners	68	Professional	

Associated Data Quality Assurance Steps

- **Statewide Client Counts:** Extensive data cross-checking efforts including comparison of initial HZA counts to data from prior DBH analyses using STARS data, code review, and, finally, querying by HZA and DBH using parallel JUCE datasets during May 2015.
- **DBHTR, including RCCY:** The effort associated with producing accurate RCCY counts was more extensive than anticipated and led to decision to include RCCY under DBHTR. A final DBH review of the Medicaid counts found that the incorporation of RCCY into the DBHTR line was not accurately executed – issue flagged by Kathleen and resolved during the week of 6/1.
- **Regional Medicaid Client Counts:** Because DBH did not have the infrastructure to produce regional Medicaid data for cross-comparison, we took a different approach to quality assuring the regional count data for Medicaid clients. Regional Medicaid count data was sorted by provider type to review data trends for any anomalies and compare the sum the regional totals against the statewide counts. An email sent to HZA on 6/17 outlined findings and Mark reviewed/confirmed all questions on 6/19 verifying accuracy.
- **HIPAA Compliance:** Subsequent discussions with DBH, sparked by regional QA process, led to a decision not to publish the Provider Type by Region tables due to potential concerns about protected health information being contained within some rows/cells. DHSS' HIPAA Compliance Officer and the Attorney General's Office have provided the following interpretation of the rule (clarification provided by Kathleen Ramage on 6/15/15 upon request by project team):

  "If the population of the area that a behavioral health agency serves is below the 20,000 population threshold, then it would be a violation of HIPAA privacy rules for us to publicly report the number of clients that the agency treated for behavioral health disorders. This would include aggregate counts of all clients who received any type of treatment for a behavioral health disorder and aggregate counts for specific services and specific demographic groups."

We understood this interpretation to mean that if there is one agency in a "Provider Type group," and that agency does not serve an area that meets our population threshold, then publicly reporting the agency's client counts is not allowed. If there are two or more agencies in the "Provider Type group," and in combination they serve an area that meets the 20,000 population threshold, then it is allowable to report the combined client counts. In order to report counts by Provider Type for each reporting region, it would have been necessary to investigate which agencies are included in the Provider Type group and the areas they serve for each year analyzed (in this case all five years). Based on the additional effort that would have been involved, The Trust and team decided not to publish provider type reports in the Regional Data packets at this time. However, we believe these reports are of high value to regional health planners and recommend future efforts to determine how and whether it is possible to release some or all of the data contained within this series of reports.

Total Number of Clients Served with Support from State Medicaid and State Behavioral Health Funds by Provider Type by Year, 2009-2013 (State and Regional Reports)

Total client counts for Medicaid, AKAIMS, DET, EDI and API – found in the "TreatmentM" table – were de-duplicated by provider type for each region as well as statewide, for each of the five years (2009-2013). To obtain these counts, we used the same Medicaid methodology described above in

combination with specific strategies for pulling accurate client count data from records within each of the non-Medicaid datasets. The rows associated with DET, API, and DBHTR grantees are the only rows with client counts that change in this table (because these are the settings for which non-Medicaid service data was available). Because a client may receive services that are grant-funded and Medicaid-funded (after a client is enrolled), it is more difficult to analyze non-Medicaid clients only.

The criteria for including AKAIMS/EDI records parallels that of DBH[1]:

- Requires the presence of an encounter/service record where the TX Start Date occurred within the selected year.
- Excludes agencies/programs that were the Alcohol Safety Action Program (ASAP), Therapeutic Courts, Fetal Alcohol Syndrome (FASD) program, Alaska Department of Corrections DOC's Short Term Substance Abuse Treatment (SSAT) Programs, Department of Motor Vehicles (DMV), and Private Providers.
- Includes programs with <u>any</u> modality type (including expired modalities; based on data checks, the number of clients showing up in programs with expired modalities is negligible).
- With the exception of the excluded agencies/programs listed above, <u>includes</u> programs that may or may not be expired and programs that include "Do Not Use" in the description (an expired/Do Not Use program just means that the agency no longer enrolls clients in the program).
- The number of clients that have an encounter note of "no show" and are a "no show" for the entire year is relatively small (less than 100) and are included.

Despite using parallel criteria for selecting DBH records, HZA's DBHTR client counts from the merged dataset (which uses Medicaid records where available) were higher than DBH's counts representing unduplicated AKAIMS/EDI counts plus Medicaid RCCY counts per year (Table 2).

Table 2. Variance in DHBTR Counts

State Fiscal Year	HZA Counts	DBH Counts	Difference
2009	20,898	17,382	3,516
2010	22,260	19,529	2,731
2011	22,976	20,285	2,691
2012	23,979	21,281	2,698
2013	23,650	21,194	2,456

DBH's interpretation of the difference seen between their AKAIMS/EDI total client counts and HZA's DBHTR total client counts is that HZA's numbers appears to be reflecting Medicaid clients that were not entered into AKAIMS (more than just the RCCY/BRS clients).[2] Although DBH was

[1] Per an email from Kathleen Ramage on 6/19/15: Based on the quality assurance steps that Mark and I went through to check the total DBHTR client counts, my assessment is that, for AKAIMS/EDI data, the logic HZA uses generally parallels the logic we use.

[2] Per an email from Kathleen Ramage on 6/19/15: In order to verify this, we would have to look at the Medicaid data set for DBHTR plus RCCY(BRS) and compare these clients to the clients in AKAIMS/EDI and determine who shows up in the Medicaid data set that is not in AKAIMS/EDI. This would be a significant work effort that we do

not involved in the de-duplication process or quality assurance steps regarding the accuracy of the de-duping process and, thus, the assumption is based on HZA's de-duping process accurately producing unduplicated client counts. Table 3 outlines the business rules associated with identifying total unique clients by provider type.

Table 3. Identifying Total Unique Clients by Provider Type

Provider Type Category	Provider Type IDs	Claims Type	Additional Notes
Designated Evaluation and Treatment (DET) Program	DET database does not include provider type ID's; however all DET clients are served by four Tribal and Private Acute Care Hospitals across the state.	Institutional	Because the DET database does not include Provider Type data, it was not possible to use existing queries to simply sort the data into the Tribal and Private Acute Care Hospital types. In order to parse out these records between Tribal and Private Acute Care, an additional layer of analysis would have been required. In addition, concerns were raised about possible protected health information and, thus, DBH recommended DET counts be reflected in a single row called out as such. Any clients paid for by Medicaid were assumed to be non-DET clients.
Alaska Psychiatric Institute (API)	3 (reassigned to 100)	Institutional	For Medicaid records, this required creating a new provider type to parse records from Other Inpatient Psychiatric. For non-Medicaid records, a new field with provider type information was added.
All DBH Treatment and Recovery Providers, including RCCY**	Day Treatment Facility (10) Alcohol and Drug Abuse Centers (36) Community Behavioral Health Centers (93-69) Residential Care for Children and Youth (RCCY/BRS; 34) AKAIMS and EDI datasets do not include provider type ID's.	Professional	For Medicaid records, challenges accurately parsing out RCCY records because of service patterns prompted DBH to guide the team to consolidate RCCY in the DBHTR grouping. Accurately identifying Community Behavioral Health Center clients requires pulling the provider ID (93) and the specialty code (69) and ensuring that specialty code 99 clients are excluded. For non-Medicaid records, establishing specific criteria for selecting clients (described above) and assigning a provider type to this field was necessary to produce total client counts across the merged datasets.

not feel is necessary at this stage; it might be something we can explore in our "next steps" after we wrap up this iteration.

Total Unique Clients (State and Region): Similar to the process to calculate Medicaid clients by provider type, the records from the all Treatment file, which consisted of JUCE records (Medicaid) and data from AKAIMS, EDI, DET and API (non-Medicaid) were linked with provider location information, as well as with the ICD9 diagnosis codes. Client counts were de-duplicated at both the statewide and regional levels for each of the five years, 2009-2013. Clients were narrowed down to include only Medicaid clients who received treatment by providers in the Behavioral Health category, i.e., those labeled "BH," and those listed under "General" who had an ICD9/Diagnosis Code between 290 and 320 as either the first or second diagnosis. In addition, all clients who received non-Medicaid treatment episodes were counted.

Associated Data Quality Assurance Steps

- **Statewide Client Counts, Initial Report Review:** Report reviewed week of 6/1/15 by Kathleen; steps taken to correctly assign all non-Medicaid records to the correct provider type. DET numbers were more challenging to align based on existing query logic and ultimately provided by DBH. API numbers were quickly signed off on by Kathleen.
- **Statewide and Regional DBHTR Client Counts:** DBHTR counts were more challenging to quality assure; in part because of the complexity of the logic required to accurately identify this pool of clients and in part because of differences within the two datasets being used to produce and compare estimated client numbers (one including actual MMIS records and the other not). Kathleen's team produced AKAIMS/EDI counts for each region early during the week of 6/15/15. Because of variation seen in client counts, Kathleen and Mark worked extensively during the latter part of the week of 6/15/15 to review client parameters, ensure report to state false programs were excluded, etc. Kathleen signed off on the statewide and regional DBHTR numbers 6/22/15 and attributed the higher numbers to likely under-documentation in AKAIMS.
- **Total Unique Client Counts:** Mark reviewed the total unique client count code and provided updated client codes 6/22/15 upon conclusion of all data quality efforts.
- **HIPPA Compliance:** Based on the same considerations outlined in the above section, the project team made a decision not to publish provider type by region reports in the assessment.

Total Annual Medicaid Payments by Provider Type and Year, 2009-2013 (State and Regional Reports)

Net Medicaid payments made to each provider type for each of the five years (2009-2013) were calculated statewide and for the ten reporting regions. Aligning with the client count methodology, the payments were narrowed to include only clients who were already counted in the Medicaid clients by provider type tables, once again using JUCE data linked with provider location information and ICD9 diagnosis codes. The same three special groups (Physicians, Psychologists, and DBHTR) were tallied separately.

The claims data reflects fee for service amounts only and does not include Tribal Behavioral Health Settlements. Due to claims processing limitations in the former MMIS, Tribal Behavioral Health Settlement payments have historically been issued to Tribal Health Organizations eligible for the daily encounter rate for services paid initially at the fee for service rate. One advantage of this data

limitation is that it allows for comparison across tribal and non-tribal providers of relative Medicaid billing activity.

Associated Data Quality Assurance Steps:

- **Financial data by provider type:** Building on the client count quality assurance steps described above, querying by HZA and DBH staff using parallel JUCE datasets during May 2015 ensured accuracy of statewide financial tables.
- **HIPAA Compliance:** Based on the same considerations outlined in the above section, the project team made a decision not to publish provider type by region reports in the assessment.

Average Annual Medicaid Payments per Client per Year by Provider Type (Statewide and Regional Reports)

Similar to the average Medicaid cost per client, this table also takes into account provider types. The average annual Medicaid cost per client by provider type was found by taking the sum of all Medicaid payments found in JUCE per provider type and year, and dividing by the number of Medicaid clients per provider type and year. Also using the JUCE Medicaid data, this table shows the average Medicaid payment per client for each of the five years (2009-2013). This average was found by taking the sum of all Medicaid payments per region per year and dividing by the corresponding number of Medicaid clients, to find the cost per client by region and year.

As part of this effort, we aspired to calculate the average cost per client by diagnosis but did not have sufficient time or resources to confirm the accuracy of these calculations. We recommend this analysis be picked back up in a subsequent phase.

We also aspired to calculate the median cost by provider type but through discussed with DBH determined that the effort would be extensive and entail summarizing total payments by client and calculating the median total payment per client for the universe of records at each provider type level. Median annual payments is an important data point for systems planning and understanding client payment trends. We recommend this analysis be pursued in a subsequent phase.

Associated Data Quality Assurance Steps:

- **Average calculations:** A::B reviewed all average calculations to ensure accuracy.

Number and Percent of Clients Served In and Outside of Their Home Region (2009-2013)

To gain estimates of services provided to clients based on location, the "TreatmentM" file – a combination of all data records from Medicaid, AKAIMS, DET, EDI, and API – was linked with client location information and provider location information. This table is based upon the client's home region, and shows the number of clients who were served only within their home region, the number who were only served outside of their home region, as well as clients who were served both in and out of their home region.

Associated Data Quality Assurance Steps:

- **Cross-table check:** As part of an effort to ensure that data included across all tables was synchronizing, A::B compared the client counts with home community information to the

total client counts as well as the sum of adult and youth client counts for each region to confirm that the percentage variance seemed in alignment for each region. These tables were reviewed by HZA during the week of 6/15 and counts for all regions were confirmed accurate.

Number and Percent of Clients Served From the Same Region and From a Different Region by Provider Service Region (2009-2013)

Using the same data as the client region of origin by service region table, these numbers are based upon the provider's location, showing the number of clients providers in each region served who lived within that same region, as well as the number of clients they served who lived outside of the region.

Associated Data Quality Assurance Steps:

- See description above.

Behavioral Health Procedure Trends by Year (State and Region)

Records from the "TreatmentM" file, which consisted of JUCE records (Medicaid) and data from AKAIMS, EDI, DET and API (non-Medicaid) were linked with provider location information, as well as with the procedure with modifier codes. Client counts were de-duplicated at both the statewide and regional levels for each of the five years, 2009-2013 by procedure codes. Counts of procedures included client characteristics, such as gender, age (under and over 18 years old) and race. Procedure code descriptions were taken from Medicaid billing ID descriptions.

Tables include summary of total unique youth and total unique adult clients by Procedure Type for all Provider Types where the claim/service record had a non-blank Procedure Code. However, it is important to note that although these tables are based on the combined service data in the merged and de-duped database, many provider types do not use procedure codes; thus, there are many services provided that would not be captured in this dataset. The tables largely reflect the services provided by professional provider types (with limited service data from institutional provider types). Moreover, we found qualitative and quantitative evidence that some agencies underreport their service encounter notes in AKAIMS. Thus, the analysis of unique client counts and percentage of clients receiving services must be reviewed with an eye toward identifying larger trends, such as gaps and areas of opportunity for expansion of services and of Medicaid billing.

If the continuum of care mapping proves a helpful framework for future analyses, the creation of procedure type categories at which de-duping would also occur (similar to the physician's and psychologists groupings in the provider type tables) would help to facilitate analysis by service grouping.

Associated Data Quality Assurance Steps:

- **Ensuring Completeness:** Procedure codes were first mapped to DBH's integrated framework for clinical and rehab services and compared to service tables provided by DBH. Gaps in data provided using initial set of queries were identified and the queries were reexamined and modified by HZA to ensure all procedure data was captured. Subsequently, select services were compared against service data previously produced by DBH based on

program enrollment data and a discussion with DBH about why variances might exist helped confirm validity of results.

- **Mapping to Continuum:** Procedure code data was then mapped to the SAMSHA's ideal continuum of care and the procedure code categorization scheme was reviewed by Terry Hamm at DBH and Michael Baldwin at The Trust during May and June 2015. All resulting tables were checked to ensure data was copied and pasted accurately.

Adult and Youth Utilization by Year (State and Regional Reports)

The utilization reports reflect a major undertaking to identify the number of unduplicated clients served by region, categorized by their diagnoses and broken down by basic demographic characteristics. Reports were created for each of the five years examined for both adult clients and youth clients for a total of 110 reports (ten for statewide utilization and ten for each of the reporting regions), plus ten tables that compare client utilization trends by region. This series of tables marks the most comprehensive set of Alaska behavioral health utilization tables produced to date and it is our hope that these tables will prove beneficial for systems and regional planning.

In the Adult Utilization tables, clients are categorized into five categories:

- SUD
- SMI
- Other Mental Health (Non-SMI)
- Co-Occurring SMI and SUD
- Co-Occurring OMH and SUD

In the Youth Utilization tables, clients are categorized into five categories:

- SUD
- SED
- Other Mental Health (Non-SED)
- Co-Occurring SED and SUD
- Co-Occurring OMH and SUD

These tables used our "TreatmentM" file, a combination of every data set from JUCE, AKAIMS, DET, EDI, and API, along with provider location information, ICD9 diagnosis codes, diagnosis categories, gender and races codes, and specific client information like date of birth. In order to be counted, the provider had to be a behavioral health provider or the client had to have an ICD9/Diagnosis code between 290 and 320 for either their first or second diagnosis. Clients also needed a properly recorded date of birth both in order to distinguish between adults and youth and because the client categories include age requirements. Clients without data on gender or race were included in the overall counts but do not appear in the breakdowns for gender or race. A diagnosis code table was created by HZA during the fall of 2014 to facilitate the categorization of individuals into the diagnosis categories. These tables were used to assign each client to one or more categories: SA (Substance Abuse), SMI (Severe Mental Illness), SED (Serious Emotional Disturbance) (youth 17 and under), and OtherMH (Other Mental Health Illness with no SMI or SED diagnosis in the same year) based on the first and second diagnoses**.** These diagnoses then went through a second

round of filtering to identify the co-occurring cases which includes anyone diagnosed with SUD and either SMI/SED or OMH.

SMI/SED are counted separately from Other MH, i.e., if someone in the same year had both SMI/SED and Other MH, he or she is counted only in the SMI/SED category. However, someone who had an SUD diagnosis was counted in that category regardless of what other diagnosis he or she may have had. Similarly, if someone was SMI/SED (or Other MH and not SMI/SED), he or she was counted in that category, even if there was also an SUD diagnosis sometime during the year. The COD numbers represent people who had both an SMI/SED and an SUD diagnosis or an Other MH (not SMI/SED) and SUD diagnosis for the same treatment episode. Because of this duplication, the percentages across the diagnosis categories do not sum to 100% for any given demographic.

A note about our methodology compared to DBH's: The State of Alaska's definition of SED/SMI includes a level of functioning requirement (see Alaska statute with client definitions below) and, thus, DBH has adopted a methodology for working with Medicaid claims data that entails using procedure code data as a proxy for level of functioning in an effort to more accurately identify individuals with SED/SMI. Specifically, when DBH analyzes Medicaid claims data across grantee providers, they use diagnosis code to determine mental health, substance abuse, or co-occurring and then procedure code to determine SED/Non-SED or SMI/Non-SMI. For clients served in psychiatric institutional or residential settings (e.g., API, Other Inpatient Psych, DET, RPTC, or BRS), all clients are assigned as SED or SMI. Clients served in an acute hospital setting (i.e., inpatient) for a mental health disorder would generally be considered SED or SMI. For outpatient service settings that are not specifically providers of behavioral health services, DBH had not yet developed a methodology for identifying SED or SMI status. In other words, where our methodology relies on diagnosis code to make this determination, DBH uses the type of provider and, where applicable, the presence of certain procedure codes, relying on the assumption that an individual with SMI/SED will be engaged in services. The methodology we used is grounded in two basic assumptions:

1) When clinicians make diagnoses, they take (or are supposed to take) the functioning level of the client into account for at least many of the diagnoses.
2) Some diagnoses are classified as SMI/SED regardless of the measured level of functioning of the client.

While it is likely that our methodology overestimates the number of clients served with SED/SMI, the approach we took allowed our team to use one methodology for the entire population analyzed which included individuals served by a range of provider types that may not use the same array of procedure codes or, in the case of institutions, may not use procedure codes at all.

That being said, it is important to note that these tables are for planning purposes, not federal reporting. Identifying a methodology that can be used across these varied datasets and aligns with DBH's needs is an area for future exploration.

Table 8 (at the end of this document) provides the diagnosis code classification scheme created and used by HZA.

For reference, Table 4 includes the Integrated Regulations rehab procedure codes DBH uses to indicate SED/SMI status (i.e., for clients with a mental health diagnosis code).

Table 4. Rehab Procedure Codes Used by DBH to Indicate Serious Emotional Disturbance and Serious Mental Illness

SMI or SED	Procedure Code/ Modifier	Service Description	Department Program Approval Category
BOTH	H0033	Oral Medication Administration, direct observation; on premises	Rehab or Detox or Residential Substance Use Tx
BOTH	H0033-HK	Oral Medication Administration, direct observation; off premises	Rehab or Detox or Residential Substance Use Tx
BOTH	H2011	Short-term Crisis Stabilization Service	Rehab
BOTH	H2017	Recipient Support Services	Rehab
BOTH	T1016	Case Management	Rehab
BOTH	H0038	Peer Support Services - Individual	Rehab
SED	H0018	Daily Behavioral Rehabilitation Services	Rehab
SED	H0038-HR	Peer Support Services - Family (with patient present)	Rehab
SED	H0038-HS	Peer Support Services - Family (w/o patient present)	Rehab
SED	H2012	Day Treatment for Children (combined mental health & school district resources)	Day Treatment
SED	H2019	Therapeutic BH Services - Individual	Rehab
SED	H2019-HQ	Therapeutic BH Services - Group	Rehab
SED	H2019-HR	Therapeutic BH Services - Family (with patient present)	Rehab
SED	H2019-HS	Therapeutic BH Services - Family (w/o patient present)	Rehab
SMI	H2015	Comprehensive Community Support Services - Individual	Rehab
SMI	H2015-HQ	Comprehensive Community Support Services - Group	Rehab

Associated Data Quality Assurance Steps:

- Reviewed by Agnew::Beck and Kathleen during week of 6/1; request for HZA to provide unduplicated client counts completed by HZA 6/5
- HZA Internal Review of Regional Code Tables: Because HZA used three different databases to perform the analyses associated with this project, a final check of each regional code table to ensure alignment and accuracy was performed prior to the final data run.
- **Cross-table check:** As part of an effort to ensure that data included across all tables was synchronizing, A::B compared the total unique client counts from the provider type tables with the sum of adult and youth client counts for each region to check alignment. Anomalies in the Other Interior Region and total client count totals when compared to regional adult and youth counts prompted a review of the adult and youth utilization charts during the week of 6/15/15. HZA found that the regional code table in the database used to generate the utilization reports were out of sync; Other Interior Region and Anchorage Region were updated as a result and provided by A::B on 6/19 and 6/22. All other regions stayed the same.
- **Co-Occurring Disorder:** The methodology we used for determining COD was dependent on the presence of a mental health diagnosis and a SUD diagnosis. In May 2015, a side by side review of the diagnosis code table created by HZA to that used by DBH, we found that the absence of a co-occurring category (i.e. the reliance on both a SUD and mental health diagnosis) meant that COD may have been undercounted. HZA investigated this issue, comparing the diagnostic table in AKAIMS to the one created by HZA and found that 1175 clients over the 5 year period statewide had one or more treatments that were categorized as SA in our analysis that would have been categorized as Dual by DBH. HZA hypothesized that a number of these clients likely would have, in fact, been diagnosed as COD in another episode (if they exhibited both MH and SUD diagnoses in said episode). Because the count represented 0.9% of all the clients during that period, it was determined that the impact from a program planning perspective would be minimal. However, it does mean that COD counts could be underestimated by up to an average of 235 clients per year. To the extent this is true, these individuals would show up as SUD only clients.
- **Racial Categories:** Through the quality assurance efforts, we realized that American Indian/Alaska Native (Any Mention) was, in fact, split across two racial categories because Medicaid does not have a Two or More Race Category and AKAIMS does. A second layer of data in AKAIMS allows further grouping of the Two or More Race Category into Alaska Native and other categories; however, this second level of racial information was not brought into the merged database. To investigate this issue further, DBH staff conducted an analysis to determine the extent to which Alaska Natives constituted the two or more race category. (This question was especially important to the team because of the desire to compare prevalence data with utilization.) The team determined that the current utilization tables and racial breakdowns would remain as is but that a percentage split for any mention AI/AN versus no mention by region for FY2013 to the Two or More Race category for the unserved need calculations. Table 5 was provided by DBH to help us understand the percentage of Alaska Native Any Mention in the Two or More Race category.

Table 5. Percentage Alaska Native Any Mention in the Two or More Race Category, Based on AKAIMS FY13 Service Data (Provided by DBH on 5/26/15)		
	% Alaska Native Any Mention	**% Other than Alaska Native**
Statewide	88.0%	12.0%
Anchorage Municipality	84.8%	15.2%
Y-K Delta	100.0%	0.0%
Fairbanks North Star Borough	82.0%	18.0%
Other Interior	89.9%	10.1%
City and Borough of Juneau	88.7%	11.3%
Kenai Peninsula Borough	84.1%	15.9%
Matanuska-Susitna Borough	94.8%	5.2%
Northwest Region	95.0%	5.0%
Southeast Region	94.5%	5.5%
Southwest Region	82.1%	17.9%

State of Alaska Statute Defining SUD, SMI, SED, and emotional disturbance.

CHILD OR ADULT EXPERIENCING A SUBSTANCE USE DISORDER [7 AAC 160.990(B)(102)]

A recipient of any age experiencing a disorder that is identified by a diagnostic code found in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders that is related to:

- alcohol, amphetamine, or similar acting sympathomimetics;
- cannabis, cocaine, hallucinogens, inhalants, nicotine, or opioids
- analogs of phencyclidine (PCP) or similar arylcyclohexylamines; or
- sedatives, hypnotics, or anxiolytics

ADULT EXPERIENCING A SERIOUS MENTAL ILLNESS (SMI) [7 AAC 160.990(B)(85)]

A recipient is 21 years of age or older who:

- has or at any time in the past year had a diagnosable mental, emotional, or behavioral disorder of sufficient duration to meet diagnostic criteria specified within the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders that has resulted in a functional impairment (a disorder that substantially interferes with or prevents functioning of episodic, recurrent, or continuous duration and not as a result of temporary, expected responses to stressful events in the recipient's environment) which substantially interferes with or limits one or more life activities, including
- Basic daily living skills, such as personal safety, eating, and personal hygiene;
- Instrumental living skills, such as managing money and negotiating transportation;

- Functioning in social, family, or vocational/educational contexts

ADULT EXPERIENCING AN EMOTIONAL DISTURBANCE [7 AAC 135.990(3)]

A recipient is 21 years of age or older who is experiencing a non-persistent mental, emotional, or behavioral disorder that:

- Is identified and diagnosed during a professional behavioral health assessment; and
- Is not the result of intellectual, physical, or sensory deficits

CHILD EXPERIENCING A SEVERE EMOTIONAL DISTURBANCE (SED) [7 AAC 160.990(B)(88)]

A recipient is under the age of 21 who:

- has or at any time in the past year had a diagnosable mental, emotional, or behavioral disorder of sufficient duration to meet diagnostic criteria specified within the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders that has resulted in a functional impairment (a disorder that substantially interferes with or prevents functioning of episodic, recurrent, or continuous duration and not as a result of temporary, expected responses to stressful events in the recipient's environment) which substantially interferes with or limits the child's role or functioning (achieving or maintaining the developmentally appropriate social, behavioral, cognitive, communicative or adaptive skills) in family, school, or community activities as indicated by a global assessment of functioning score of 50 or less;
- exhibits specific mental, emotional, or behavioral disorders that
- place the individual at imminent risk for out-of-home placement;
- place the individual at imminent risk for being placed in the custody of the Division of Juvenile Justice [AS 47.14]
- have resulted in the individual being placed in the protective custody of Office of Children's Services [AS 47.10]

CHILD EXPERIENCING AN EMOTIONAL DISTURBANCE [7 AAC 135.990(9)]

A recipient is under the age of 21 who is experiencing a non-persistent mental, emotional, or behavioral disorder that:

- is identified and diagnosed during a professional behavioral health assessment; and
- is not the result of intellectual, physical, or sensory deficits

Unserved Need (Comparison of Prevalence and Utilization)

In the analysis plan produced in May 2014, the project team established the goal of using prevalence and utilization data to calculate unmet need. We found that the task of marrying prevalence data, population data and utilization has inherent challenges. These challenges include:

- Using three years of combined NSDUH data resulted in relatively small cell sizes for a number of the prevalence estimates by DBH planning region; prevalence estimates often had wide confidence intervals and some estimates were suppressed. The DBH planning

region prevalence estimates were applied to the generally corresponding reporting regions used in this study; this created further complications in getting accurate regional estimates of unserved individuals.

- Population data did not readily align with prevalence estimates or the population receiving services.
    - *Active Military:* The population estimates used include people in active military even though the NSDUH prevalence rates do not apply to people in active military and active military do not tend to use State Medicaid or State-funded behavioral health services. In 2013, DOL estimates 23,004 people in active military - this is broken out by region but not by gender, age, or race (see table 6). Lack of detailed population data was a barrier to excluding this population. We recommend future efforts explore the feasibility of obtaining more detailed data on active military.

Table 6. Active Duty Military and Dependents excerpted from AKDOL

Active Duty Military and Dependents by Borough and Census Area, 2010 and 2013

	Military		Dependents	
Area Name	July 1, 2010	July 1, 2013	July 1, 2010	July 1, 2013
Alaska	23,195	23,004	32,809	33,052
Aleutians East Borough	0	0	0	0
Aleutians West Census Area	4	7	2	5
Anchorage, Municipality	12,787	12,295	18,118	19,067
Bethel Census Area	0	0	0	0
Bristol Bay Borough	0	0	0	0
Denali Borough	99	113	273	165
Dillingham Census Area	0	0	0	0
Fairbanks North Star Borough	8,166	8,617	11,734	11,378
Haines Borough	0	0	0	0
Hoonah-Angoon Census Area	0	0	0	0
Juneau, City and Borough	267	232	449	382
Kenai Peninsula Borough	93	92	109	111
Ketchikan Gateway Borough	241	155	224	188
Kodiak Island Borough	950	904	1,220	1,133
Lake and Peninsula Borough	0	0	0	0
Matanuska-Susitna Borough	0	0	0	0
Nome Census Area	1	0	3	0
North Slope Borough	0	0	0	0
Northwest Arctic Borough	0	0	0	0
Petersburg Borough	28	27	25	13
Prince of Wales-Hyder Census Area	0	0	0	0
Sitka, City and Borough	187	194	233	269
Skagway, Municipality	0	0	0	0
Southeast Fairbanks Census Area	209	217	223	160
Valdez-Cordova Census Area	163	151	196	181
Wade Hampton Census Area	0	0	0	0
Wrangell, City and Borough	0	0	0	0
Yakutat, City and Borough	0	0	0	0
Yukon-Koyukuk Census Area	0	0	0	0

Notes: All numbers are based on the location of the base the military service person is assigned to, and do not include service members deployed overseas.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

- *Institutional Settings:* The population estimates used include people in institutions even though the NSDUH prevalence rates do not apply to people in institutions and, as with active military, the majority of these individuals do not fall within the target population of services paid for with State Medicaid and State Behavioral Health fund. Here again, data be broken out by region but not by gender, age, or race. Lack of detailed population data was a barrier to excluding this population. In 2010, the institutionalized population constitutes about 6,458 people statewide in the following institution[3]:

Table 7. Institutional Settings included in General Population Estimates (U.S. Census 2010 Summary File 1; PCT20: Detailed Group Quarters)
Institutionalized population
Correctional facilities for adults
Federal detention centers
Federal prisons
State prisons
Local jails and other municipal confinement facilities
Correctional residential facilities
Military disciplinary barracks and jails
Juvenile facilities
Group homes for juveniles (non-correctional)
Residential treatment centers for juveniles (non-correctional)
Correctional facilities intended for juveniles
Nursing facilities/Skilled-nursing facilities
Other institutional facilities:
Mental (Psychiatric) hospitals and psychiatric units in other hospitals
Hospitals with patients who have no usual home elsewhere
In-patient hospice facilities
Military treatment facilities with assigned patients
Residential schools for people with disabilities

- *Use of Total Population:* Our prevalence methodology estimated the total need for behavioral health services. Thus, unserved need was equal to prevalence minus utilization for a given region and diagnosis category. In using total population estimates to calculate total unserved need, we contemplated whether population estimates for individuals below a certain federal poverty level might better reflect need for state-funded services. This is an area to explore further in future iterations.

- After calculating and reviewing unserved need tables, the project team in coordination with DBH, opted for an alternative approach to illustrating the gap between services and utilization data. This approach included visually comparing prevalence and utilization counts using charts and exploring utilization trends by calculating the utilization rate per 1,000 for each population group. As with the methodology of calculating unserved need, this method points to important trends and highlights a number of gaps that can inform system decision making. It also has the benefit of not trying to force the marriage of three disparate datasets.

[3] Based on U.S. Census 2010 Summary File 1; PCT20: Detailed Group Quarters

Table 8.

ICD_9_Code	ICD_9 Description	SA	SED	SMI	OtherMH
290.00	Senile dementia, uncomplicated	0	0	0	1
290.10	Presenile dementia	0	0	0	1
290.11	Presenile dementia with delirium	0	0	0	1
290.12	Presenile dementia with delusional features	0	0	0	1
290.13	Presenile dementia with depressive features	0	0	0	1
290.20	Senile dementia with delusional or depressive features	0	0	0	1
290.21	Senile dementia with depressive features	0	0	0	1
290.30	Senile dementia with delirium	0	0	0	1
290.40	Vascular dementia	0	0	0	1
290.41	Vascular dementia, with delirium	0	0	0	1
290.42	Vascular dementia, with delusions	0	0	0	1
290.43	Vascular dementia, with depressed mood	0	0	0	1
290.80	Other specified senile psychotic conditions	0	0	0	1
290.90	Unspecified senile psychotic condition	0	0	0	1
291.00	Alcohol withdrawel delirium	1	0	0	0
291.10	Alcohol-induced persisting amnestic disorder	1	0	0	0
291.20	Alcohol induced persisting dementia	1	0	0	0
291.30	Alcohol induced psychotic disorder with hallucinations	1	0	0	0
291.40	Idiosyncratic alcohol intoxication	1	0	0	0
291.81	Alcohol withdrawal	1	0	0	0
291.82	Alcohol induced sleep disorder	1	0	0	0
291.89	Other alcohol induced mood disorders	1	0	0	0
291.90	Unspecified alcohol induced mental disorders	1	0	0	0
292.00	Drug induced mental disorders	1	0	0	0
292.11	Drug induced psychotic disorder with delusions	1	0	0	0
292.12	Drug induced psychotic disorder with hallucinations	1	0	0	0
292.20	Drug withdrawal	1	0	0	0

292.81	Drug induced delirium	1	0	0	0
292.82	Drug-induced persisting dementia	1	0	0	0
292.83	Drug-induced persisting amnesic disorder	1	0	0	0
292.84	Drug-induced mood disorder	1	0	0	0
292.84	Drug induced mood disorder	1	0	0	0
292.85	Drug induced sleep disorder	1	0	0	0
292.89	Drug induced anxiety or dysfunction	1	0	0	0
292.90	Unspecified drug induced mental disorder	1	0	0	0
293.00	Delirium due to conditions classified elsewhere	0	0	0	1
293.10	Subacute delirium	0	0	0	1
293.81	Psychotic disorder with delusions in conditions classified elsewhere	0	0	0	1
293.82	Psychotic disorder with hallucinations in conditions classified elsewhere	0	0	0	1
293.83	Mood disorder in conditions classified elsewhere	0	0	0	1
293.84	Anxiety disorder in conditions classified elsewhere	0	0	0	1
293.89	Other specified transient mental disorders due to conditions classified elsewhere, other	0	0	0	1
293.90	Unspecified transient mental disorder in conditions classified elsewhere	0	0	0	1
294.00	Amnestic disorder in conditions classified elsewhere	0	0	0	1
294.10	Dementia in conditions classified elsewhere without behavioral disturbance	0	0	0	1
294.11	Dementia in conditions classified elsewhere with behavioral disturbance	0	0	0	1
294.20	Dementia, unspecified, without behavioral disturbance	0	0	0	1
294.21	Dementia, unspecified, with behavioral disturbance	0	0	0	1

294.80	Other persistent mental disorders due to conditions classified elsewhere	0	0	0	1
294.90	Unspecified persistent mental disorders due to conditions classified elsewhere	0	0	0	1
295.00	Simple Type Schizophrenia, Unspecified State	0	1	1	0
295.01	Simple Type Schizophrenia, Subchronic State	0	1	1	0
295.02	Simple Type Schizophrenia, Chronic State	0	1	1	0
295.03	Simple Type Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.04	Simple Type Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.05	Simple Type Schizophrenia, in Remission	0	1	1	0
295.10	Disorganized Type Schizophrenia	0	1	1	0
295.11	Disorganized Type Schizophrenia, Subchronic State	0	1	1	0
295.12	Disorganized Type Schizophrenia, Chronic State	0	1	1	0
295.13	Disorganized Type Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.14	Disorganized Type Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.15	Disorganized Type Schizophrenia, in Remission	0	1	1	0
295.20	Catatonic Schizophrenia	0	1	1	0
295.21	Catatonic State Schizophrenia, Subchronic State	0	1	1	0
295.22	Catatonic Type Schizophrenia, Chronic State	0	1	1	0
295.23	Catatonic Type Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0

295.24	Catatonic Type Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.25	Catatonic Type Schizophrenia, in Remission	0	1	1	0
295.30	Paranoid Schizophrenia	0	1	1	0
295.31	Paranoid Type Schizophrenia, Subchronic State	0	1	1	0
295.32	Paranoid Type Schizophrenia, Chronic State	0	1	1	0
295.33	Paranoid Type Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.34	Paranoid Type Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.35	Paranoid Type Schizophrenia, in Remission	0	1	1	0
295.40	Acute Schizophrenic Episode, Unspecified State	0	1	1	0
295.41	Acute Schizophrenic Episode, Subchronic State	0	1	1	0
295.42	Acute Schizophrenic Episode, Chronic State	0	1	1	0
295.43	Acute Schizophrenic Episode, Subchronic State With Acute Exacerbation	0	1	1	0
295.44	Acute Schizophrenic Episode, Chronic State With Acute Exacerbation	0	1	1	0
295.45	Acute Schizophrenic Episode, in Remission	0	1	1	0
295.50	Latent Schizophrenia	0	1	1	0
295.51	Latent Schizophrenia, Subchronic State	0	1	1	0
295.52	Latent Schizophrenia, Chronic State	0	1	1	0
295.53	Latent Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.54	Latent Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.55	Latent Schizophrenia, in Remission	0	1	1	0

295.60	Residual Schizophrenia	0	1	1	0
295.61	Residual Schizophrenia, Subchronic State	0	1	1	0
295.62	Residual Schizophrenia, Chronic State	0	1	1	0
295.63	Residual Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.64	Residual Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.65	Residual Schizophrenia, in Remission	0	1	1	0
295.70	Schizo-Affective Disorder	0	1	1	0
295.71	Schizo-Affective Type Schizophrenia, Subchronic State	0	1	1	0
295.72	Schizo-Affective Type Schizophrenia, Chronic State	0	1	1	0
295.73	Schizo-Affective Type Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.74	Schizo-Affective Type Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.75	Schizo-Affective Type Schizophrenia, in Remission	0	1	1	0
295.80	Other Specified Types of Schizophrenia	0	1	1	0
295.81	Other Specified Types of Schizophrenia, Subchronic State	0	1	1	0
295.82	Other Specified Types of Schizophrenia, Chronic State	0	1	1	0
295.83	Other Specified Types of Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.84	Other Specified Types of Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.85	Other Specified Types of Schizophrenia, in Remission	0	1	1	0

295.90	Unspecified Schizophrenia	0	1	1	0
295.91	Unspecified Schizophrenia, Subchronic State	0	1	1	0
295.92	Unspecified Schizophrenia, Chronic State	0	1	1	0
295.93	Unspecified Schizophrenia, Subchronic State With Acute Exacerbation	0	1	1	0
295.94	Unspecified Schizophrenia, Chronic State With Acute Exacerbation	0	1	1	0
295.95	Unspecified Schizophrenia, in Remission	0	1	1	0
296.00	Manic Disorder, Single Episode, Unspecified Degree	0	1	1	0
296.01	Manic Disorder, Single Episode, Mild Degree	0	1	1	0
296.02	Manic Disorder, Single Episode, Moderate Degree	0	1	1	0
296.03	Manic Disorder, Single Episode, Severe Degree, Without Mention of Psychotic Behavior	0	1	1	0
296.04	Manic Disorder, Single Episode, Severe Degree, Specified as With Psychotic Behavior	0	1	1	0
296.05	Manic Disorder, Single Episode, in Partial or Unspecified Remission	0	1	1	0
296.06	Manic Disorder, Single Episode, in Full Remission	0	1	1	0
296.10	Manic Disorder, Recurrent Episode	0	1	1	0
296.11	Manic Disorder, Recurrent Episode, Mild Degree	0	1	1	0
296.12	Manic Disorder, Recurrent Episode, Moderate Degree	0	1	1	0
296.13	Manic Disorder, Recurrent Episode, Severe Degree, Without Mention of Psychotic Behavior	0	1	1	0
296.14	Manic Disorder, Recurrent Episode, Severe Degree, Specified as With Psychotic Behavior	0	1	1	0

296.15	Manic Disorder, Recurrent Episode, in Partial or Unspecified Remission	0	1	1	0
296.16	Manic Disorder, Recurrent Episode, in Full Remission	0	1	1	0
296.20	Major Depressive Disorder, Episde, Single Episode	0	1	1	0
296.21	Major Depressive Disorder, Single Episode, Mild Degree	0	1	1	0
296.22	Major Depressive Disorder, Single Episode, Moderate Degree	0	1	1	0
296.23	Major Depressive Disorder, Single Episode, Severe Degree, Without Mention of Psychotic Behavior	0	1	1	0
296.24	Major Depressive Disorder, Single Episode, Severe Degree, Specified as With Psychotic Behavior	0	1	1	0
296.25	Major Depressive Disorder, Single Episode, in Partial or Unspecified Remission	0	1	1	0
296.26	Major Depressive Disorder, Single Episode in Full Remission	0	1	1	0
296.30	Major Depressive Disorder, Recurrent Episode	0	1	1	0
296.31	Major Depressive Disorder, Recurrent Episode, Mild Degree	0	1	1	0
296.32	Major Depressive Disorder, Recurrent Episode, Moderate Degree	0	1	1	0
296.33	Major Depressive Disorder, Recurrent Episode, Severe Degree, Without Mention of Psychotic Behavior	0	1	1	0
296.34	Major Depressive Disorder, Recurrent Episode, Severe Degree, Specified as With Psychotic Behavior	0	1	1	0
296.35	Major Depressive Disorder, Recurrent Episode, in Partial or Unspecified Remission	0	1	1	0

296.36	Major Depressive Disorder, Recurrent Episode, in Full Remission	0	1	1	0
296.40	Bipolar Affective Disorder, Manic, Unspecified Degree	0	1	1	0
296.40	Bipolar I Disorder, Most Recent Episode (or current) Manic	0	1	1	0
296.41	Bipolar Affective Disorder, Manic, Mild Degree	0	1	1	0
296.42	Bipolar Affective Disorder, Manic, Moderate Degree	0	1	1	0
296.43	Bipolar Affective Disorder, Manic, Severe Degree, Without Mention of Psychotic Behavior	0	1	1	0
296.44	Bipolar Affective Disorder, Manic, Severe Degree, Specified as With Psychotic Behavior	0	1	1	0
296.45	Bipolar Affective Disorder, Manic, in Partial or Unspecified Remission	0	1	1	0
296.46	Bipolar Affective Disorder, Manic, in Full Remission	0	1	1	0
296.50	Bipolar Affective Disorder, Depressed, Unspecified Degree	0	1	1	0
296.50	Bipolar I Disorder, Most Recent Episode (or curent) Depressed	0	1	1	0
296.51	Bipolar Affective Disorder, Depressed, Mild Degree	0	1	1	0
296.52	Bipolar Affective Disorder, Depressed, Moderate Degree	0	1	1	0
296.53	Bipolar Affective Disorder, Depressed, Severe Degree, Without Mention of Psychotic Behavior	0	1	1	0
296.54	Bipolar Affective Disorder, Depressed, Severe Degree, Specified as With Psychotic Behavior	0	1	1	0
296.55	Bipolar Affective Disorder, Depressed, in Partial or Unspecified Remission	0	1	1	0
296.56	Bipolar Affective Disorder, Depressed, in Full Remission	0	1	1	0

296.60	Bipolar Affective Disorder, Mixed, Unspecified Degree	0	1	1	0
296.61	Bipolar Affective Disorder, Mixed, Mild Degree	0	1	1	0
296.62	Bipolar Affective Disorder, Mixed, Moderate Degree	0	1	1	0
296.63	Bipolar Affective Disorder, Mixed, Severe Degree, Without Mention of Psychotic Behavior	0	1	1	0
296.64	Bipolar Affective Disorder, Mixed, Severe Degree, Specified as With Psychotic Behavior	0	1	1	0
296.65	Bipolar Affective Disorder, Mixed, in Partial or Unspecified Remission	0	1	1	0
296.66	Bipolar Affective Disorder, Mixed, in Full Remission	0	1	1	0
296.70	Bipolar Affective Disorder, Unspecified	0	1	1	0
296.80	Manic-Depressive Psychosis, Unspecified	0	1	1	0
296.81	Atypical Manic Disorder	0	1	1	0
296.82	Atypical Depressive Disorder	0	1	1	0
296.89	Other Manic-Depressive Psychosis	0	1	1	0
296.90	Unspecified Affective Psychosis	0	1	1	0
296.99	Other Specified Affective Psychoses	0	1	1	0
297.00	Paranoid State, Simple	0	1	1	0
297.10	Paranoia	0	1	1	0
297.20	Paraphrenia	0	1	1	0
297.30	Shared Paranoid Disorder	0	1	1	0
297.80	Other Specified Paranoid States	0	1	1	0
297.90	Unspecified Paranoid State	0	1	1	0
298.00	Depressive Type Psychosis	0	1	1	0
298.10	Excitative Type Psychosis	0	1	1	0
298.20	Reactive Confusion	0	1	1	0
298.30	Acute Paranoid Reaction	0	1	1	0
298.40	Psychogenic Paranoid Psychosis	0	1	1	0
298.80	Other and Unspecified Reactive Psychosis	0	1	1	0
298.90	Unspecified Psychosis	0	1	1	0
299.00	Infantile Autism, Current or Active State	0	1	0	0

299.01	Infantile Autism, Residual State	0	1	0	0
299.10	Disintegrative Psychosis, Current or Active State	0	1	0	0
299.11	Disintegrative Psychosis, Residual State	0	1	0	0
299.80	Other Specified Early Childhood Psychoses, Current or Active State	0	1	0	0
299.81	Other Specified Early Childhood Psychoses, Residual State	0	1	0	0
299.90	Unspecified Childhood Psychosis, Current or Active State	0	1	0	0
299.91	Unspecified Childhood Psychosis, Residual State	0	1	0	0
300.00	Anxiety State, Unspecified	0	1	1	0
300.01	Panic Disorder Without Agoraphobia	0	1	1	0
300.02	Generalized Anxiety Disorder	0	1	1	0
300.09	Other Anxiety States	0	1	1	0
300.10	Hysteria	0	0	1	0
300.11	conversion disorder	0	0	1	0
300.12	Psychogenic Amnesia	0	0	1	0
300.13	Psychogenic Fugue	0	0	1	0
300.14	Multiple Personality	0	1	1	0
300.15	Dissociative disorder or reaction, unspecified	0	0	1	0
300.16	Factitious illness wth psycological symptoms	0	0	1	0
300.19	other unspecified factitious illness	0	0	1	0
300.20	Panic Disorders	0	1	1	0
300.21	Agoraphobia With Panic Attacks	0	1	1	0
300.22	Agoraphobia Without Mention of Panic Attacks	0	1	1	0
300.23	Social Phobia	0	1	0	0
300.29	Other Isolated or Simple Phobias	0	1	0	0
300.30	Obsessive-Compulsive Disorders	0	1	1	0
300.40	Neurotic Depression	0	1	1	0
300.50	Neurasthenia	0	1	1	0
301.00	Paranoid Personality Disorder	0	1	1	0
301.10	Affective Personality Disorder, Unspecified	0	1	1	0

301.11	Chronic Hypomanic Personality Disorder	0	1	1	0
301.12	Chronic Depressive Personality Disorder	0	1	1	0
301.13	Cyclothymic Disorder	0	1	1	0
301.20	Schizoid Personality Disorder, Unspecified	0	1	1	0
301.21	Introverted Personality	0	1	1	0
301.22	Schizotypal Personality	0	1	1	0
301.40	Compulsive Personality Disorder	0	1	1	0
301.50	Histrionic Personality Disorder, Unspecified	0	1	1	0
301.51	Chronic Factitious Illness With Physical Symptoms	0	1	1	0
301.59	Other Histrionic Personality Disorder	0	1	1	0
301.60	Dependent Personality Disorder	0	1	1	0
301.81	Narcissistic Personality	0	1	1	0
301.82	Avoidant Personality	0	1	1	0
301.83	Borderline Personality	0	1	1	0
301.84	Passive-Aggressive Personality	0	1	1	0
301.89	Other Personality Disorders	0	1	1	0
301.90	Unspecified Personality Disorder	0	1	1	0
302.00	Ego-dystonic sexual orientation	0	0	0	1
302.10	Zoophilia	0	0	0	1
302.20	Pedophilia	0	0	0	1
302.30	Transvestic fetishism	0	0	0	1
302.40	Exhibitionism	0	0	0	1
302.50	Trans-sexualism with unspecified sexual history	0	0	0	1
302.51	Trans-sexualism with asexual history	0	0	0	1
302.52	Trans-sexualism with homosexual history	0	0	0	1
302.53	Trans-sexualism with heterosexual history	0	0	0	1
302.60	Gender identity disorder in children	0	0	0	1
302.70	Psychosexual dysfunction, unspecified	0	0	0	1
302.71	Hypoactive sexual desire disorder	0	0	0	1
302.72	Psychosexual dysfunction with inhibited sexual excitement	0	0	0	1

302.73	Female orgasmic disorder	0	0	0	1
302.74	Male orgasmic disorder	0	0	0	1
302.75	Premature ejaculation	0	0	0	1
302.76	Dyspareunia, psychogenic	0	0	0	1
302.79	Psychosexual dysfunction with other specified psychosexual dysfunctions	0	0	0	1
302.81	Fetishism	0	0	0	1
302.82	Voyeurism	0	0	0	1
302.83	Sexual masochism	0	0	0	1
302.84	Sexual sadism	0	0	0	1
302.85	Gender identity disorder in adolescents or adults	0	0	0	1
302.89	Other specified psychosexual disorders	0	0	0	1
302.90	Unspecified psychosexual disorder	0	0	0	1
303.00	AC ALCOHOL INTOX-UNSPEC	1	0	0	0
303.01	AC ALCOHOL INTOX-CONTIN	1	0	0	0
303.02	AC ALCOHOL INTOX-EPISOD	1	0	0	0
303.03	AC ALCOHOL INTOX-REMISS	1	0	0	0
303.90	Other and unspecified alcohol dependence	1	0	0	0
303.90	ALCOH DEP NEC/NOS-UNSPEC	1	0	0	0
303.91	ALCOH DEP NEC/NOS-CONTIN	1	0	0	0
303.92	ALCOH DEP NEC/NOS-EPISOD	1	0	0	0
303.93	ALCOH DEP NEC/NOS-REMISS	1	0	0	0
304.00	OPIOID DEPENDENCE-UNSPEC	1	0	0	0
304.01	OPIOID DEPENDENCE-CONTIN	1	0	0	0
304.02	OPIOID DEPENDENCE-EPISOD	1	0	0	0
304.03	OPIOID DEPENDENCE-REMISS	1	0	0	0
304.10	Barbiturate and similarly acting sedative or hypnotic dependence	1	0	0	0
304.10	BARBITURAT DEPEND-UNSPEC	1	0	0	0
304.11	BARBITURAT DEPEND-CONTIN	1	0	0	0
304.12	BARBITURAT DEPEND-EPISOD	1	0	0	0
304.13	BARBITURAT DEPEND-REMISS	1	0	0	0
304.20	Cocaine dependence	1	0	0	0
304.20	COCAINE DEPEND-UNSPEC	1	0	0	0
304.21	COCAINE DEPEND-CONTIN	1	0	0	0
304.22	COCAINE DEPEND-EPISODIC	1	0	0	0
304.23	COCAINE DEPEND-REMISS	1	0	0	0
304.30	Cannabis dependence	1	0	0	0

304.30	CANNABIS DEPEND-UNSPEC	1	0	0	0
304.31	CANNABIS DEPEND-CONTIN	1	0	0	0
304.32	CANNABIS DEPEND-EPISODIC	1	0	0	0
304.33	CANNABIS DEPEND-REMISS	1	0	0	0
304.40	Amphetamine and other psychostimulant dependence	1	0	0	0
304.40	AMPHETAMIN DEPEND-UNSPEC	1	0	0	0
304.41	AMPHETAMIN DEPEND-CONTIN	1	0	0	0
304.42	AMPHETAMIN DEPEND-EPISOD	1	0	0	0
304.43	AMPHETAMIN DEPEND-REMISS	1	0	0	0
304.50	Hallucinogen dependence	1	0	0	0
304.50	HALLUCINOGEN DEP-UNSPEC	1	0	0	0
304.51	HALLUCINOGEN DEP-CONTIN	1	0	0	0
304.52	HALLUCINOGEN DEP-EPISOD	1	0	0	0
304.53	HALLUCINOGEN DEP-REMISS	1	0	0	0
304.60	Other specified drug dependence	1	0	0	0
304.60	DRUG DEPEND NEC-UNSPEC	1	0	0	0
304.61	DRUG DEPEND NEC-CONTIN	1	0	0	0
304.62	DRUG DEPEND NEC-EPISODIC	1	0	0	0
304.63	DRUG DEPEND NEC-IN REM	1	0	0	0
304.70	Combinations of opioid type drug with any other	1	0	0	0
304.70	OPIOID/OTHER DEP-UNSPEC	1	0	0	0
304.71	OPIOID/OTHER DEP-CONTIN	1	0	0	0
304.72	OPIOID/OTHER DEP-EPISOD	1	0	0	0
304.73	OPIOID/OTHER DEP-REMISS	1	0	0	0
304.80	Combinations of drug dependence excluding opioid type drug	1	0	0	0
304.80	COMB DRUG DEP NEC-UNSPEC	1	0	0	0
304.81	COMB DRUG DEP NEC-CONTIN	1	0	0	0
304.82	COMB DRUG DEP NEC-EPISOD	1	0	0	0
304.83	COMB DRUG DEP NEC-REMISS	1	0	0	0
304.90	Unspecified drug dependence	1	0	0	0
304.90	DRUG DEPEND NOS-UNSPEC	1	0	0	0
304.91	DRUG DEPEND NOS-CONTIN	1	0	0	0
304.92	DRUG DEPEND NOS-EPISODIC	1	0	0	0
304.93	DRUG DEPEND NOS-REMISS	1	0	0	0
305.00	ALCOHOL ABUSE-UNSPEC	1	0	0	0
305.01	ALCOHOL ABUSE-CONTINUOUS	1	0	0	0
305.02	ALCOHOL ABUSE-EPISODIC	1	0	0	0
305.03	ALCOHOL ABUSE-IN REMISS	1	0	0	0

305.10	Tobacco use disorder	1	0	0	0
305.20	Cannabis abuse	1	0	0	0
305.20	CANNABIS ABUSE-UNSPEC	1	0	0	0
305.21	CANNABIS ABUSE-CONTIN	1	0	0	0
305.22	CANNABIS ABUSE-EPISODIC	1	0	0	0
305.23	CANNABIS ABUSE-IN REMISS	1	0	0	0
305.30	Hallucinogen abuse	1	0	0	0
305.30	HALLUCINOG ABUSE-UNSPEC	1	0	0	0
305.31	HALLUCINOG ABUSE-CONTIN	1	0	0	0
305.32	HALLUCINOG ABUSE-EPISOD	1	0	0	0
305.33	HALLUCINOG ABUSE-REMISS	1	0	0	0
305.40	Barbiturate and similarly acting sedative or hypnotic abuse	1	0	0	0
305.40	BARBITURATE ABUSE-UNSPEC	1	0	0	0
305.41	BARBITURATE ABUSE-CONTIN	1	0	0	0
305.42	BARBITURATE ABUSE-EPISOD	1	0	0	0
305.43	BARBITURATE ABUSE-REMISS	1	0	0	0
305.50	Opioid abuse	1	0	0	0
305.50	OPIOID ABUSE-UNSPEC	1	0	0	0
305.51	OPIOID ABUSE-CONTINUOUS	1	0	0	0
305.52	OPIOID ABUSE-EPISODIC	1	0	0	0
305.53	OPIOID ABUSE-IN REMISS	1	0	0	0
305.60	Cocaine abuse	1	0	0	0
305.60	COCAINE ABUSE-UNSPEC	1	0	0	0
305.61	COCAINE ABUSE-CONTINUOUS	1	0	0	0
305.62	COCAINE ABUSE-EPISODIC	1	0	0	0
305.63	COCAINE ABUSE-IN REMISS	1	0	0	0
305.70	Amphetamine or related acting sympathomimetic abuse	1	0	0	0
305.70	AMPHETAMINE ABUSE-UNSPEC	1	0	0	0
305.71	AMPHETAMINE ABUSE-CONTIN	1	0	0	0
305.72	AMPHETAMINE ABUSE-EPISOD	1	0	0	0
305.73	AMPHETAMINE ABUSE-REMISS	1	0	0	0
305.80	Antidepressant type abuse	1	0	0	0
305.80	ANTIDEPRESS ABUSE-UNSPEC	1	0	0	0
305.81	ANTIDEPRESS ABUSE-CONTIN	1	0	0	0
305.82	ANTIDEPRESS ABUSE-EPISOD	1	0	0	0
305.83	ANTIDEPRESS ABUSE-REMISS	1	0	0	0
305.90	Other, mixed, or unspecified drug abuse	1	0	0	0
305.90	DRUG ABUSE NEC-UNSPEC	1	0	0	0

305.91	DRUG ABUSE NEC-CONTIN	1	0	0	0
305.92	DRUG ABUSE NEC-EPISODIC	1	0	0	0
305.93	DRUG ABUSE NEC-IN REMISS	1	0	0	0
306.00	Musculoskeletal malfunction arising from mental factors	0	0	0	1
306.10	Respiratory malfunction arising from mental factors	0	0	0	1
306.20	Cardiovascular malfunction arising from mental factors	0	0	0	1
306.30	Skin disorder arising from mental factors	0	0	0	1
306.40	Gastrointestinal malfunction arising from mental factors	0	0	0	1
306.50	Psychogenic genitourinary malfunction, unspecified	0	0	0	1
306.51	Psychogenic vaginismus	0	0	0	1
306.52	Psychogenic dysmenorrhea	0	0	0	1
306.53	Psychogenic dysuria	0	0	0	1
306.59	Other genitourinary malfunction arising from mental factors	0	0	0	1
306.60	Endocrine disorder arising from mental factors	0	0	0	1
306.70	Disorder of organs of special sense arising from mental factors	0	0	0	1
306.80	Other specified psychophysiological malfunction	0	0	0	1
306.90	Unspecified psychophysiological malfunction	0	0	0	1
307.10	Anorexia Nervosa	0	1	0	0
307.20	Tic Disorder, Unspecified	0	1	0	0
307.21	Chronic Motor Tic Disorder	0	1	0	0
307.22	Gilles De La Tourettes Disorder	0	1	0	0
307.23	Stereotyped Repetitive Movements	0	1	0	0
307.30	Tic Disorder, Unspecified	0	1	0	0
307.50	Eating Disorders, Unspecified	0	1	0	0
307.51	Bulimia	0	1	0	0
307.52	Pica	0	1	0	0
307.53	Psychogenic Rumination	0	1	0	0
307.54	Psychogenic Vomiting	0	1	0	0
307.59	Other Disorders of Eating	0	1	0	0
307.60	Enuresis	0	1	0	0
307.70	Encopresis	0	1	0	0

308.00	Predominant disturbance of emotions	0	0	0	1
308.10	Predominant disturbance of consciousness	0	0	0	1
308.20	Predominant psychomotor disturbance	0	0	0	1
308.30	Other acute reactions to stress	0	0	0	1
308.40	Mixed disorders as reaction to stress	0	0	0	1
308.90	Unspecified acute reaction to stress	0	0	0	1
309.00	Adjustment disorder with depressed mood	0	0	0	1
309.10	Prolonged depressive reaction	0	0	0	1
309.21	Separation Anxiety Disorder	0	1	0	0
309.22	Emancipation disorder of adolescence and early adult life	0	0	0	1
309.23	Specific academic or work inhibition	0	0	0	1
309.24	Adjustment disorder with anxiety 0	0	0	0	1
309.28	Adjustment disorder with mixed anxiety and depressed mood	0	0	0	1
309.29	Other adjustment reactions with predominant disturbance of other emotions	0	0	0	1
309.30	Adjustment disorder with disturbance of conduct	0	0	0	1
309.40	Adjustment disorder with mixed disturbance of emotions and conduct	0	0	0	1
309.81	Prolonged Posttraumatic Stress Disorder	0	1	1	0
309.82	Adjustment reaction with physical symptoms	0	0	0	1
309.83	Adjustment reaction with withdrawal	0	0	0	1
309.89	Other specified adjustment reactions	0	0	0	1
309.90	Unspecified adjustment reaction	0	0	0	1
310.00	Frontal lobe syndrome	0	0	0	1
310.10	Personality change due to conditions classified elsewhere	0	0	0	1
310.20	Postconcussion syndrome	0	0	0	1

310.81	Pseudobulbar affect	0	0	0	1
310.89	Other specified nonpsychotic mental disorders following organic brain damage	0	0	0	1
310.90	Unspecified nonpsychotic mental disorder following organic brain damage	0	0	0	1
311.00	Depressive Disorder, not Elsewhere Classified	0	1	1	0
312.00	Undersocialized conduct disorder, aggressive type, unspecified	0	0	0	1
312.01	Undersocialized conduct disorder, aggressive type, mild	0	0	0	1
312.02	Undersocialized conduct disorder, aggressive type, moderate	0	0	0	1
312.03	Undersocialized conduct disorder, aggressive type, severe	0	0	0	1
312.10	Undersocialized conduct disorder, unaggressive type, unspecified	0	0	0	1
312.11	Undersocialized conduct disorder, unaggressive type, mild	0	0	0	1
312.12	Undersocialized conduct disorder, unaggressive type, moderate	0	0	0	1
312.13	Undersocialized conduct disorder, unaggressive type, severe	0	0	0	1
312.20	Socialized conduct disorder, unspecified	0	0	0	1
312.21	Socialized conduct disorder, mild	0	0	0	1
312.22	Socialized conduct disorder, moderate	0	0	0	1
312.23	Socialized conduct disorder, severe	0	0	0	1
312.30	Impulse Control Disorder, Unspecified	0	1	0	0
312.31	Pathological gambling	0	0	0	1
312.32	Kleptomania	0	0	0	1
312.33	Pyromania	0	1	0	0
312.34	Intermittent Explosive Disorder	0	1	0	0
312.35	Isolated Explosive Disorder	0	1	0	0
312.39	Other Disorders of Impulse Control	0	1	0	0
312.40	Mixed disturbance of conduct and emotions	0	0	0	1

312.81	Conduct disorder, childhood onset type	0	0	0	1
312.82	Conduct disorder, adolescent onset type	0	0	0	1
312.89	Other conduct disorder	0	0	0	1
312.90	Unspecified Disturbance of Conduct	0	1	0	0
313.00	Overanxious Disorder Specific to Childhood and Adolescence	0	1	0	0
313.10	Misery and Unhappiness Disorder Specific to Childhood and Adolescence	0	1	0	0
313.21	Shyness Disorder of Childhood	0	1	0	0
313.22	Introverted Disorder of Childhood	0	1	0	0
313.23	Elective Mutism	0	1	0	0
313.30	Relationship Problems Specific to Childhood and Adolescence	0	1	0	0
313.81	Oppositional Disorder of Childhood or Adolescence	0	1	0	0
313.82	Identity Disorder of Childhood or Adolescence	0	1	0	0
313.83	Academic Underachievement Disorder of Childhood or Adolescence	0	1	0	0
313.89	Other Emotional Disturbances of Childhood or Adolescence	0	1	0	0
313.90	Unspecified Emotional Disturbance of Childhood or	0	1	0	0
314.00	Attention Deficit Disorder of Childhood Without Mention of Hyperactivity	0	1	0	0
314.01	Attention Deficit Disorder of Childhood With Hyperactivity	0	1	0	0
314.10	Hyperkinesis of Childhood With Developmental Delay	0	1	0	0
314.20	Hyperkinesis Conduct Disorder of Childhood	0	1	0	0
314.80	Other Specified Manifestations of Hyperkinetic Syndrome	0	1	0	0
314.90	Unspecified Hyperkinetic Syndrome of Childhood	0	1	0	0
315.00	Developmental reading disorder, unspecified	0	0	0	1

315.01	Alexia	0	0	0	1
315.02	Developmental dyslexia	0	0	0	1
315.09	Other specific developmental reading disorder	0	0	0	1
315.10	Mathematics disorder	0	0	0	1
315.20	Other specific developmental learning difficulties	0	0	0	1
315.31	Expressive language disorder	0	0	0	1
315.32	Mixed receptive-expressive language disorder	0	0	0	1
315.34	Speech and language developmental delay due to hearing loss	0	0	0	1
315.35	Childhood onset fluency disorder	0	0	0	1
315.39	Other developmental speech or language disorder	0	0	0	0
315.40	Developmental coordination disorder	0	0	0	0
315.50	Mixed development disorder	0	0	0	0
315.80	Other specified delays in development	0	0	0	0
315.90	Unspecified delay in development	0	0	0	0
316.00	Psychic factors associated with diseases classified elsewhere	0	0	0	0
317.00	Mild intellectual disabilities	0	0	0	0
318.00	Moderate intellectual disabilities	0	0	0	0
318.10	Severe intellectual disabilities	0	0	0	1
318.20	Profound intellectual disabilities	0	0	0	1
319.00	Unspecified intellectual disabilities	0	0	0	1
787.60	Incontinence of Feces	0	1	0	0