## TRIAGE EVALUATION APPENDICES

### APPENDIX A. MULTI-LEVEL, DIFFERENCE-IN-DIFFERENCES STUDY DESIGN

### Difference-in-Differences

A pre-/post-intervention study design that compares an intervention group to a control group that did not receive the intervention can provide strong causal inference when using a difference-in-differences analytic approach (McEwen, 2010; Mascha & Sessler, 2019). A valuable benefit to a difference-indifferences approach is that, if intervention and comparison groups are similar enough, impact estimates should be unaffected by longitudinal trends in the broader economy or service systems.

Difference-in-Differences compares longitudinal trendlines before and after an intervention. As such, there are two main ways to assess the impact of a given intervention. The first is a break in the regression line at, or near, the time of intervention. This break is measured as a jump in the intervention group regression line up or down the Y axis at the time of intervention. To estimate this jump, the expected Y intercept (based on trend lines before the intervention) is compared to the observed Y intercept immediately following the intervention. The difference between these points is the proximal impact of the intervention. Secondly, the impact of the intervention can also be measured through differences in the slopes of the intervention and comparison group regression lines after the intervention. This difference is then compared to the observed differences between these same lines prior to the intervention. The "difference in differences" is then compared. A statistically non-zero difference would then be attributed to the impact of the intervention. Equation A1 describes a model for assessing pre-/post-intervention trends between intervention and control groups.

#### Equation A1. Difference-in-Differences Model

 $\begin{aligned} Y_{it} &= \beta_0 + \beta_1 time_t + \beta_2 intervention_{it} + \beta_3 time_post_t + \beta_4 Group_i + \beta_5 Group_i \times time_t \\ &+ \beta_6 Group_i \times intervention_{it} + \beta_7 Group_i \times intervention_{it} \times time_post_t \\ &+ \beta_{8-n} Covariate_i + \varepsilon_{it} \end{aligned}$ 

where  $Y_{it}$  is the outcome of measurement for individual i at time t

*time* = *t* is a value from 1 to *k* increasing from the start of the pre-intervention study period to the end of the post-intervention

 $intervention_t = 1$  if the intervention was received by individual i at time t, and 0 if not,

*time\_post* = 0 if pre-intervention study period. Otherwise, indicator of time lag from the start of the post-intervention study period

Group=1 if the individual *i* is in the intervention group, 0 if individual *i* is in the comparison

p is the number of covariates,

 $\beta_0$  is the outcome individual *i* at *time* 0,

 $\beta_1$  is the slope of the pre-intervention period for individuals in the comparison group,

 $\beta_2$  is the change in outcome rate immediately after the intervention for individuals in the comparison group,

 $\beta_3$  is the difference in slopes between pre- and post-intervention periods for individuals in the comparison group,

 $eta_4$  is the mean difference in outcome rate between the intervention group and the comparison group,

 $\beta_5$  is the difference of pre-intervention slopes between the intervention and control groups,

 $eta_6$  is the difference between the predicted and actual slope intercepts,

 $\beta_7$  compares the post-intervention slopes between the intervention and control groups,

 $eta_8$  -  $eta_{(p+8)}$  are the effects of the covariates upon the outcome measure,

 $\varepsilon_t$  is the random error at *time t* that is unaccounted for by the model and is assumed to be normally distributed.

The two main coefficients of interest are  $\beta_2$  and  $\beta_7$ . A statistically significant value for  $\beta_2$  indicates that there was an immediate impact of the intervention upon the outcome events. It represents the difference between the predicted and observed intercept values of the post-intervention trend line among individuals in the intervention group. A statistically significant value for  $\beta_7$  indicates that the intervention affected the ongoing rate of change for the post-intervention trend line among individuals in the intervention group.

A key assumption of the DID design is that unmeasured or poorly measured variables are not confounders as long as intervention and comparison groups are equivalent. To test this equivalence, the pre-intervention trends of the outcome measure over time for the intervention and control groups must be parallel. A visual inspection of the preintervention outcome distributions and significance test of the difference in pre-intervention slopes will establish that that assumption is satisfied. The assumption that unmeasured variables do not affect outcomes over time differently between groups may be investigated by comparing plots between the intervention and control groups of the outcome variable stratified by covariates (e.g., age, sex, ethnicity). Plots on each strata should show parallel trends between intervention and control groups, but the trends do not have to be linear.

# Multi-Level Model

When individuals are nested within larger entities such as students nested within schools or persons nested within counties a multi-level statistical model is appropriate. Variables associated with the individual are known as level 1 predictors while variables associated with the larger entities are known as level 2 predictors. The relationship between a dependent variable and the level 1 predictors may

differ depending on the classroom or county in which they are nested. The multi-level model allows for the regression intercepts and slopes to vary across level 2 entities.

Equations A2 provides the structure for calculating the level 2 intercepts and slopes associated with the level 1 predictors.

Equations A2.

$$\begin{aligned} \gamma_{ij} &= \beta_{0j} + \beta_{1j} X_{ij} + r_{ij} \\ \beta_{0j} &= \gamma_{00} + \gamma_{01} W_j + u_{0j} \\ \beta_{1j} &= \gamma_{10} + \gamma_{11} + u_{1j} \end{aligned}$$

Where  $\gamma_{ij}$  is outcome  $\gamma$  for individual *i* in county *j*.

 $\beta_{0i}$  is the mean outcome for all individuals within county j,

- $\beta_{1j}$  is the mean change in outcome for a one unit increase in predictor X for in county j.
- $X_{1j}$  is the value of predictor X for individual i in county j.
- $r_{ij}$  is the error term for individual *i* in county *j*.
- $\gamma_{00}$  is the mean outcome for all level two groups,
- $\gamma_{01}$  is the mean difference in  $\gamma_{00}$  for a one unit increase in W for county j.
- $W_i$  is the value of predictor W for county j.
- $u_{0j}$  is the random error term for county j,
- $\gamma_{10}$  is the mean change in outcome for a one unit change in X for all counties.
- $\gamma_{11}$  is the mean difference in  $\gamma_{10}$  for county *j*.
- $u_{1j}$  is the random error term for county *j*.

### APPENDIX B. PROPENSITY SCORE MATCHED NON-TRIAGE CONTROL GROUPS

Since it was not possible to randomly assign persons to a Triage program or control group, propensity score matching may be employed to create a non-Triage comparison group. The creation of a matched control group proposed in this evaluation relies heavily upon the assignment of a propensity score for individuals which reflects the probability that that individual will enter Triage. This probability reflects a number of socio-ecological factors, including the individual's demographic and clinical features. For example, persons with severe mental illness may be more likely to have a Triage encounter than a person with a less severe illness. A person's sex, age, race or ethnicity may also impact their likelihood of a Triage encounter. To identify these probabilities an initial logistic regression analysis is performed among clients with CSI records who live in the counties where a Triage program exists. The dependent variable in this regression is whether a person received Triage services. The coefficients for each predictor variable may be expressed as each variable's contribution to the probability that a person will have a Triage encounter. Using the coefficients from the logistic regression and each client's individual demographic and clinical information, each client's predicted probability of receiving Triage services is estimated.

The process of matching Triage clients to control non-Triage clients has four phases, 1) establishing locations from where non-Triage controls are drawn, 2) identifying attributes for which an exact match will be required, 3) calculating propensity scores for the Triage and non-Triage clients, and 4) identifying controls who match exactly on select characteristics and most closely match the scores of the Triage clients.

It is preferred that non-Triage comparisons be drawn from the same county as Triage clients. The rationale is that such persons share the same county's behavioral health and transportation infrastructure. It is acknowledged that drawing controls from that same county as the Triage clients my introduce a spillover effect from Triage to non-Triage clients that may underestimate the measured effect of Triage. However, the equity of infrastructure is thought to be a more powerful driver of outcomes than a potential spillover. Controls will be drawn from counties with similar characteristics if it is not possible to find matches from counties with smaller populations.

On face value it is reasonable to match clients exactly on diagnostic categories and age categories. During the initial logistic regression investigation of variables associated with a Triage event described above, variables with the strongest predictive value may be identified as candidates for an exact match. The SAS PSMatch procedure provides diagnostics to assess which combinations of variables best predict the Triage event.

An important feature of matched clients is the assignment of an initial Triage entry date to the non-Triage controls. To remove some of the arbitrariness of such an assignment, Triage clients who have particular outcome event such as an emergency department visit, hospital stay or arrest accompanying their initial Triage entry date will be matched with a non-Triage client who also had such an outcome event within the 30 days of a Triage client. Triage clients with no such accompanying outcome event will be matched with non-Triage clients who also had no such events in the 30 days prior to the initial Triage date. This not only serves to better match persons on illness severity but attempts to establish a demarcating crisis from which pre-/post-Triage periods may be justifiably established for the non-Triage client. The initial Triage service date of the comparison individual will be set as the date of the Triage client's initial Triage date. In cases where no common crisis event may be identified the index date of the control will equal the index date of their matching Triage client.

While exact matches of characteristics between Triage clients and their non-Triage counterparts is preferred, it is not always possible to identify non-Triage clients that will match on all relevant characteristics. A set of priority characteristics will be developed based on prevalence of client demographic and clinical data, and the predictive relationship between these variables and receiving Triage services.

Once a set of key factors has been identified, and subsamples of Triage clients and non-Triage clients are formed who match on these key characteristics, propensity for being assigned to Triage will then be calculated. Within each subsample, Triage clients will then be paired with their closest matching neighbor, without replacement.

### APPENDIX C. ANALYSIS FILES

Appendix Table C1 provides an anticipated structure of the analysis file (covariates are described in Table C5). Variables below include client information, outcomes, covariates, time indicators, and treatment assignment.

For clients that entered Triage with an inpatient stay, ED visit, or arrest, those events will be attributed to the pre-Triage period as the client has not yet received the intervention. The rationale is that the Triage program has not yet had the opportunity to affect these events, and therefore they should not be interpreted as outcomes. For clients with inpatient stays, the initial Triage date should be set to the inpatient discharge date.

Variable	Description	Valid Values	Rationale
Client_ID	Unique identifier for each person in study	Character	Account for pre-/post correlation within individuals
Match_ID	Number common to each person and their matched control	Character	Account for matched Triage/Control correlation
Time	A value from 1 to <i>k</i> increasing quarterly from the start of the pre-intervention study period to the end of the post-intervention for a given individual (limited to 4 years, 1 to 16 quarters)	1, 2,, 16	Account for increased risk of outcome event as individual approaches Triage index date. Risk of event may increase the further an individual exceeds Triage index date.
Post_Intervention	0 if pre-intervention study period or the number of quarters from the start of the post-intervention study period (limited to 2 years, 0 to 8 quarters)	0, 1,, 8	Measure of time lapse post intervention to measure outcomes across time.
Intervention	1 if the intervention was received at time <i>t</i> and 0 if not	0, 1	Distinguished treatment from comparison group
Group	1if the individual had a Triage encounter, 0 if they did not.	0, 1	Differentiate between Triage and control groups
Post_Triage	Indicates whether time period is pre or post Triage services.	0, 1	Differentiate between pre-/post- Index Triage date
Arrest	Indicates whether arrest occurred	0, 1	Dependent Variable: Count arrests
Inpatient	Inpatient admissions	0, 1	Dependent Variable
ED_Visit	Emergency department visits	0, 1	Dependent Variable
Covariates	See Table C6.		

## Appendix Table C1. Structure of the Analysis File

## Measurement of Employment:

The Employment Development Department (EDD) records provide quarterly earnings. There are no indicators of the number of hours or days worked. Thus, employment will be measured as both a binary variable indicating whether there were any earnings reported in a given quarter, and as a conversion of total earnings to equivalent weekly hours employed at minimum wage. Table C2 provides the structure of the quarterly analysis file.

Variable	Description	Valid Values	Rationale
Client_ID	Unique identifier for each person in study	character	Account for pre-/post correlation within individuals
Match_ID	Number common to each person and their matched control	character	Account for matched Triage/Control correlation
Pre_Employ	Dichotomous variable measuring whether the individual was employed at any level prior to intervention	0,1	Basic measure of employment engagement prior to intervention
Post_Employ	Dichotomous variable measuring whether the individual was employed at any level post Triage intervention	0,1	Basic measure of employment engagement post intervention
Pre_Hours	Quarterly conversion of total earnings into minimum wage equivalent hours per week for the time prior to intervention	0,1,240	Covariate: Accounting for differences in employment behavior prior to intervention
Post_Hours	Quarterly conversion of total earnings into minimum wage equivalent hours per week for the time prior to intervention	0,1,240	Outcome variable: measures employment behavior
Group	1 if the individual had a Triage encounter, 0 if they did not.	0, 1	Differentiate between Triage and control groups
Covariates	See Table C6.		

Table	C2.	Structure	of	Emp	lo	vment	File
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## Measurement of Services:

A receipt of behavioral health services post-crisis event is measured post-crisis only and compared with controls. A binary dependent variable indicating whether services were provided post-Triage will be modeled. Service provision will be extracted from CSI records. Analysis of the service provision will also include services reported directly to the MHSAOC from the Triage counties as well as those recorded in the CSI.

## Triage Service Linkage

The breadth of services that clients may engage is wide and includes services that may reduce the likelihood of a future crisis event or occur during a future crisis event. It is beyond the scope of the summative evaluation to conduct an in-depth assessment of the nature and benefit of each individual

service. As both linkage to services and reduction of future crisis events are goals of Triage grant funds, an increase in preventative services would be interpreted as a positive impact. Defining preventative is convoluted, as what is preventative in one circumstance may not be in another. However, as measure linkages to services is a component of this analysis, an operational definition of service linkage for this study will be any future services rendered after initial triage date that does not coincide with an inpatient psychiatric stay or emergency department visit. Services rendered during the dates of an inpatient psychiatric stay or emergency department stay will not be counted towards the cumulative service linkage post Triage event.

Impacts on service linkage will be estimated in two ways. First, we will examine whether individuals who receive Triage services are more likely than individuals who do not receive Triage services to have *any amount* of follow-up services post intervention. We will also compare mean number of follow-up services between the Triage and comparison groups to estimate *an average increase in service utilization* for individuals in the intervention group. It is suspected that individuals who receive services before a Triage event will be more likely to receive services following the event. Thus, a variable reflecting whether a client received services within the two years prior to index Triage event will be created and used as a covariate. Table C2 provides the data structure for the service analysis file.

Variable	Description	Valid Values	Rationale
Client_ID	Unique identifier for each person in study	character	Account for pre-/post correlation within individuals
Match_ID	Number common to each person and their matched control	character	Account for matched Triage/Control correlation
Pre_Serv	Number of non-crisis (non in-patient or ED visit) services received pre intervention	0,1,2	Covariate: Total count of number of preventative services utilized by clients pre-intervention
Post_Serv	Number of non-crisis services received post intervention	0,1,2	Dependent variable: Cumulative number of non-crisis services utilized by client over time post intervention
Group	1 if the individual had a Triage encounter, 0 if they did not.	0, 1	Differentiate between Triage and control groups
Covariates	See Table C6.		

Table C3. Structure of Service Analysis File

# Measurement of Recidivism

For this evaluation, recidivism is measured as the time from an initial Triage arrest event to a subsequent arrest. Clients with an arrest within 30 days before or on the initial Triage date will be selected for this outcome measure. Matched non-Triage clients with an arrest with that same period comprise the control group. As engagement with law enforcement, and particularly arrest, is a major life event that can alter the life trajectory, arrest will be measured dichotomously for the two-year duration of the study. Any subsequent arrest within the two-year study window would be expected to have

substantial impacts on an individual's life and is therefore a negative outcome regardless of when during the two-year period said arrest occurred. As with the logistic regression models in this evaluation, the interaction between the Triage Group indicator and the Pre-/Post Triage indicator will assess the impact of the Triage programs while controlling for unobserved effects common in both the Triage and control groups. Table C4 provides the data structure of the Recidivism analysis file.

Variable	Description	Valid Values	Rationale
Client_ID	Unique identifier for each person in study	Char	Account for pre-/post correlation within individuals
Match_ID	Number common to each person and their matched control	Char	Account for matched Triage/Control correlation
Arrest_pre	Dichotomous indicator of arrest date within 30-days before index Triage date.	0, 1	Inclusion criteria for arrest subsample
Arrest_Type	Type of pre arrest: 1=Infraction, 2=misdemeanor, 3=Felony	1, 2, 3	Measures severity of criminal justice involvement
Arrest_Type_post	Type of post arrest: 0= none 1=Infraction, 2=misdemeanor, 3=Felony	0, 1, 2, 3	Dependent Variable
Group	1 if the individual had a Triage encounter, 0 if they did not.	0, 1	Differentiate between Triage and control groups
Post_Triage	Indicates whether time period is pre or post Triage services.	0, 1	Differentiate between pre- /post-Index Triage date
Covariates	See Covariates in Table C6.		

Table C4.	Structure	of	Recidivism	Analy	ysis	File
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#### **Education Measures**

Suspension, attendance, and enrollment measures are reported in the California Department of Education (CDE) file. It records these by academic year.

Variable	Description	Valid Values	Rationale
Client_ID	Unique identifier for each person in study	Char	Account for pre-/post correlation within individuals
Match_ID	Number common to each person and their matched control	Char	Account for matched Triage/Control correlation
Pct_attend	Annual attendance measure, equal to percent of school days in attendance	0-100	Proxy for attachment to school

Table C5. Structure of Education Analysis File

Stop_out	Quarterly measure of whether a student has disengaged from school measured as an attendance rate below 50%	0, 1	Students who have disengaged from school are unlikely to complete on time.
Suspend	Quarterly, cumulative measure of the total number of days suspend in a given year	0, 1, 2, 3	Students who are suspended are more likely to disengage from school (dropout)
Enroll_grad	Dichotomous measure of whether a student remains enrolled, graduates or completed a GED	0, 1	Outcome: positive education outcome

# Covariates

Table C6 provides a list of covariates that will be explored for their impact upon outcome measures.

Covariate	Description
Level 1 Variables	Person Level Characteristics
Point of Entry	Law enforcement, ER, other
Age	Age at initial Triage date. Age categories that minimally delineate Child (5-15), Transitional Age Youth (16-25), Adult (26-59), & Older Adult (60+). More granular delineations including continuous age may be used if appropriate.
Sex	Male, Female, Non-binary/Unknown
Race and ethnicity	Latino/a, Black or African American, White (not Hispanic or Latino/a), Multi-racial, American Indian or Alaskan Native, Eastern Asian, Other Asian, Pacific Islander, Other, Unknown/not reported
Primary Language	English, Spanish, Cantonese, Mandarin, Cambodian, Russian Tagalog, Vietnamese, Korean, Armenian, Farsi, Dari, Pashto, Russian, Arabic, Japanese, Punjabi, Khmer
Country of Birth	U.S. vs. non-U.S. (or regions)
Employment Status	Employment status from EDD and CSI: Full time equivalent, less than full time equivalent, not employed.
Living Arrangement	From CSI
Trauma	From CSI: Yes, No, Unknown

# Table C6 Covariates for Triage outcome measures

Diagnosis	Categorical based on CSI data
Multiple Primary	0 = singular primary diagnoses
Diagnoses	1 = multiple primary diagnoses
FSP Pre-Triage	1 = engaged with Full Service Partnership pre Triage
	0 = not engaged with Full Service Partnership pre Triage
FSP Post-Triage	1 = engaged with Full Service Partnership post Triage
	0 = not engaged with Full Service Partnership post Triage
Post-Triage services received by type	Set of binary indicators by service type cluster. Service clusters will be determined based upon depth of service information received.
Level 2 Variables	County/Service Planning Area Characteristics in 2020
Size (population)	Total civilian noninstitutional population
Urbanicity	Density of development (residential and commercial)(rural vs urban)
Race / ethnicity	Racial and ethnic composition of county
Gender	Gender composition as reported by US Census
Percent living below poverty line	Income threshold by family size as set by US Census
High school dropout rate	Cohort specific high school dropout rate
Employment rate	Total workforce (employed or seeking) divided by the working age population (civilian, noninstitutionalized)
Annual earnings	Average annual pay from all sources (pre-tax)
Homelessness	Percent of individuals living without stable housing
Licensed psychiatric unit beds	Number of psychiatric beds available county wide

Psychiatric bed occupancy rate	Percent of licensed psychiatric beds occupied
Transportation accessibility	An index created by MHSOAC researchers using principal component analysis

## APPENDIX D. MENTAL HEALTH RELATED ICD-10 DIAGNOSIS CODES

F01-F09 Mental disorders due to known physiological conditions

F10-F19 Mental and behavioral disorders due to psychoactive substance use

F20-F29 Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders

F30-F39 Mood [affective] disorders

F40-F48 Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders

F50-F59 Behavioral syndromes associated with physiological disturbances and physical factors

F60-F69 Disorders of adult personality and behavior

F90-F98 Behavioral and emotional disorders with onset usually occurring in childhood and adolescence

F99-F99 Unspecified mental disorder

### APPENDIX E. CSI SERVICE CATEGORIES

In coordination with MHSOAC mental health consultants the following categories of services were constructed to support evaluation of the Triage grant program.

#### 24 Hour Service Facilities

Jail	inpatient
Inpatient Setting	Hospital, inpatient
	Hospital, day admittance
	Psychiatric Health Facility
	IMD (basic)
	IMD with PATCH
	Mental health rehabilitation center
	SNF intensive
Community Setting Peer	Adult crisis resident
community Setting, reer	Adult residential
	Residential
	Independent living
	Other semi-supervised living

Note: Community-based 24-hour services could be combined with outpatient services to examine service receipt in the 6-week post-crisis follow-up period.

# **Day Service Facilities**

Emergency room
Urgent care
Day rehabilitation, full day
Day rehabilitation, half day
Day treatment intensive, full day
Day treatment intensive, half day
Note: There is a trend toward moving away from providing these services to children. PH/IO services could be combined with outpatient services to examine service receipt in the 6-week post-crisis follow-up period.
SNF augmentation Socialization Vocation services
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# **Outpatient Services**

Case Management
Crisis intervention
Medical support
Mental health services
Inpatient visit
Therapeutic behavioral services

# APPENDIX F. CSI SERVICE FUNCTIONS (S-06.0)

CSI Mode of Service	Defined Categories	CSI Variables	Code	Description
24-Hour	1. Jail	JAIL INPATIENT	50-59	A distinct unit within an adult or juvenile
Services				detention facility which is staffed to provide
Categories				intensive psychiatric treatment of inmates.
(1.1. 1. 05)	2. Institutional	HOSPITAL INPATIENT	10-18	Services in acute psychiatric hospital or part of
(Mode 05)	Settings	HOSPITAL ADMIN DAY	19	a general hospital
		PSYCH HEALTH FACILITY (PHF)	20-29	Stay beyond the need for acute care & lack of nursing facility beds
		facility)	30-34	Therapeutic and/or rehab services provided in
		IMD BASIC (no PATCH) IMD WITH PATCH	35	non-hospital 24-hour inpatient setting
		MH REHAB CENTER	36-39	SNF with more than 50% of diagnosed w/mental disorder.

			90-94	Program which provides intensive support and rehab services
	3.Community- Based, Peer- Driven Settings	ADULT CRISIS RESIDENT ADULT RESIDENTIAL RESIDENTIAL (Other) INDEPENDENT LIVING SEMI-SUPERVISED LIVING	40-49 65-79 60-64 85-89 80-84	Crisis services provided in a residential setting Rehabilitative services, provided in a residential setting Children's residential programs and other types of programs Program for those needing support to live in the community Program of structured living arrangements for persons who do not need intensive support but who, without some support and structure, may return to a condition requiring hospitalization
Day Services (Mode 10)	1. Crisis Stabilization	CRISIS STABILIZATION – ER CRISIS STABILIZATION – UR	20-24 25-29	Immediate face-to-face response lasting less than 24 hours, to or on behalf of a client exhibiting acute psychiatric symptoms (ER: Emergency room; UR: Urgent Care) provided in a 24-hour health facility or hospital-based outpatient program
	2. Partial Hospitalization/ Intensive Outpatient Services	DAY REHAB - FULL DAY DAY REHAB - HALF DAY DAY TRMT INTENSIV - F/D (full- day) DAY TRMT INTENSIV - H/D (half day)	95-99 91-94 85-89 81-84	Day rehabilitation provides evaluation and therapy to maintain or restore personal independence and functioning Day Treatment Intensive service provides an organized and structured treatment program as an alternative to hospitalization
	3. Rehabilitation Services	VOCATIONAL SERVICES SOCIALIZATION SNF AUGMENTATION	30-39 40-49 60-69	Facilitate individual motivation/focus upon vocational goals Structured support and skill development (independent living) Organized therapeutic activities which augment existing SNF

Outpatient Services	1. Outpatient Services	CASE MGMT/BRKER COLLATERAL	01-09	Assist a client to access different types of needed services.
(Mode 15)		CRISIS INTERVENTION (CI) MED SUPPORT (MS) MH SERVICES (MHS) THERAPEUTIC BHV SERV.	70-78 60-68 50-57 58	Interventions reducing mental disability/restoring functioning. Crisis service for a condition which requires more timely response, Prescribing, administering, dispensing, and monitoring medication
		PROF INPATIENT VISIT – CI* PROF INPAT VIS – MS* PROF INPAT VISIT – COLL* PROF INPAT VISIT – MHS*	79 69 19 39	Mental health services Therapeutic service designed to maintain the child's residential placement at the lowest appropriate level. These services are the same as Mental Health Services except the services are provided in a non-SD/MC inpatient setting by professional staff.

Notes: Codes in this table represent a sample of codes received to date. Additional codes may become available throughout the data acquisition process. Mental health services provided in a hospital setting. However, a client is not admitted to the hospital.

### APPENDIX G. CALIFORNIA COUNTY POPULATION

	Total	Size Classification	Size classification per	Urban/Rural
County	Population	per population	population density	Classification
Alameda	1,671,329	Large	Large	Urban
Butte	219,186	Medium	Medium	Rural
Calaveras	45,905	Small	Medium	Rural
City of Berkeley	121,363	N/A	N/A	Urban
Humboldt	135,558	Medium	Small	Rural
Los Angeles	10,039,107	Large	Large	Urban
Merced	277,680	Medium	Medium	Rural
Placer	398,329	Medium	Small	Rural
Riverside	2,470,546	Large	Large	Urban
Sacramento	1,552,058	Large	Large	Urban
San Francisco	881,549	Large	Large	Urban
San Luis Obispo	283,111	Medium	Medium	Rural
Santa Barbara	446,499	Large	Medium	Rural
Sonoma	494,336	Large	Large	Rural
Stanislaus	550,660	Large	Large	Rural
Tuolumne	54,478	Small	Small	Rural
Ventura	846,006	Large	Large	Urban
Yolo	220,500	Medium	Large	Rural

Based on US Census 2019 estimates (https://www.census.gov/quickfacts/)

In this table, size classification is relative to California population and population density totals – top, middle, and lower tertiary groups. Berkeley City falls within the middle tertiary range

#### APPENDIX H. CALIFORNIA MSA COUNTIES

The Office of Management and Budget (OMB) establishes and maintains the delineations of Metropolitan Statistical Areas, Metropolitan Divisions, and Micropolitan Statistical Areas solely for statistical purposes.

- Metropolitan Statistical Areas (MSA) have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
- Micropolitan Statistical Areas have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

Metropolitan Counties
Alameda
Contra Costa
Los Angeles
Marin
Orange
San Francisco
San Mateo

<b>Micropolitian Counties</b>
Del Norte
Humboldt
Lake
Lassen
Mendocino
Nevada
Tehama
Tuolumne

MSA definitions and county designations were excerpted from the California Employment Development Department website: <u>https://www.labormarketinfo.edd.ca.gov/definitions/metropolitan-statistical-areas.html#MSA</u>

# APPENDIX J. MENTAL HEALTH PROVIDER SHORTAGE AREAS - COUNTY LEVEL

Mental health provider shortages will be evaluated by county and correspond to the number of full-time equivalent (FTE) staff the county is short to meet the county's needs, and the county's overall Health Provider Shortage Score. Health Provider Service Area Designation are calculated and obtained from the Health Resource Service Administration (HRSA)(link below). HPSA score ranges from 0 to 26, with higher scores representing greater shortage areas.

County	HPSA Score	FTE Staff Shortage	Update Date
Alameda	Not reported	Not reported	N/A
Butte	16	8.92	9/9/21
Calaveras	17	2.75	8/5/21
Humboldt	Not reported	Not reported	N/A
Los Angeles	12 - 20	5.21 - 11.31	11/16/21
Merced	18	13.46	8/24/21
Placer	12	0.72	8/5/21
Riverside	18	0.98	9/9/21
Sacramento	Not reported	Not reported	N/A
San Bernardino	9 - 18	0.13 – 2.89	9/9/21
San Francisco	Not reported	Not reported	N/A
San Luis Obispo	Not reported	Not reported	N/A
Santa Barbara	15	3.56	11/7/21
Sonoma	6	3.31	8/26/21
Stanislaus	Not reported	Not reported	N/A
Tulare	16	26.66	7/27/21
Tuolumne	13	1.62	8/17/21
Ventura	Not reported	Not reported	N/A
Yolo	Not reported	Not reported	N/A

https://data.hrsa.gov/tools/shortage-area/hpsa-find

#### APPENDIX K. PSYCHIATRIC BEDS

County	Psychiatric Beds/	Psychiatric Beds/
County		
Alameda	2.09	2.06
Butte	2.63	0
Calaveras	0	0
City of Berkeley	-	-
Humboldt	1.46	0
Los Angeles	2.51	1.08
Merced	0.81	0
Placer	0.52	0
Riverside	0.96	0.2
Sacramento	2.89	1.57
San Francisco	3.51	1.70
San Luis Obispo	0.69	0
Santa Barbara	1.04	0
Sonoma	1.88	2.10
Stanislaus	1.64	0
Tuolumne	0	0
Ventura	1.47	1.78
Yolo	1.78	0

Rates based on Census 2019 population estimates and bed counts from CalMatters report (cite)

APPENDIX L. PERCENT OF INDIVIDUALS LIVING UNDER FEDERAL POVERTY LEVEL

	Percent of Individuals
County	<b>Below Poverty Level</b>
Alameda	9.9%
Butte	19.1%
Calaveras	11.4%
City of Berkeley	19.2%
Humboldt	20.1%
Los Angeles	14.9%
Merced	21.2%
Placer	7.7%
Riverside	13.7%
Sacramento	14.7%
San Francisco	10.3%
San Luis Obispo	12.5%
Santa Barbara	13.5%

Sonoma	9.2%
Stanislaus	15.1%
Tuolumne	12.8%
Ventura	8.9%
Yolo	19.1%

Percentages based on the American Community Survey (ACS) 5-year estimates.

### APPENDIX M: RATE OF HOMELESSNESS

County	Homeless rate/10K
Alameda, Berkeley	33.0
Butte	49.1
Humboldt	51.4
Los Angeles	53.4
Merced	18.9
Placer/Nevada	19.5
Riverside	9.6
Sacramento	23.7
San Francisco	77.5
San Luis Obispo	38.6
Sta Barbara	38.1
Sonoma	59.4
Stanislaus	24.7
Tuolumne, Calaveras,	
Amador, Mariposa	25.5
Ventura	15.3
Yolo	20.4

https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-report/california/

# References

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