

Criminal Justice Dashboard Methodology

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Dashboard Description:

The Mental Health Service Act calls for a focus on addressing seven “negative outcomes” that might result from untreated mental illness, including incarcerations, school failure or dropout, unemployment, prolonged suffering, homelessness, and removal of children from their homes. To assess the potential impact of mental health services on indicators of criminal justice involvement, such as arrests, mental health service data from the Full Service Partnership (FSP) program were linked with arrest data from the Department of Justice for years 2009-2016. Analyses of these linked data show that there was a dramatic reduction in arrest rates for clients who had received intensive FSP mental health services across demographic subgroups, and across most counties.

Base Data:

Mental health data from Full Service Partnership (FSP) programs, including clients' demographics (age, race/ethnicity, gender) and their length of participation in FSP programs were obtained from the Department of Health Care Services (DHCS).

Mental health FSP data were linked on an individual level to California Department of Justice (DOJ) data across years 2007 – 2016. DOJ data included demographic information (name, race, gender), number of arrests, and arrest types. DOJ and FSP mental health data were linked using a probabilistic matching method using individuals' names, dates of birth, ages, and their race/ethnicity.

The study period was from July 1, 2007 – June 30, 2016.

The final data set included 64,294 partners (age 18 or older), and 59,013 unique clients.

Partners under 18 were excluded from this analysis, as they were not present in the Department of Justice Data.

Calculations:

Arrest Rates Before, During, and After FSP Participation were calculated per 100 partners by partners' age group, sex, race/ethnicity, and county. The Before and After periods are limited

to 1 year prior to, and 1 year after, the FSP enrollment period. Partners who were/are still in an active FSP (i.e. have not exited the FSP in the DCR data) have a zero weight in both the numerator and the denominator for the After period.

Arrest Rate Per 100 Partners Calculation

Period	Calculation
Year Before FSP	$100 * (365^{i*} (\text{Arrests Year Prior to FSP Enrollment}) / \text{calculated Length of Service Year}^{ii} \text{ Prior to FSP Enrollment})$
During FSP	$100 * (365^{i*} (\text{Arrests During FSP Enrollment}) / \text{calculated Length of Service}^{ii} \text{ During FSP Enrollment})$
Year After FSP	$100 * (365^{i*} (\text{Arrests Year After FSP Enrollment}) / \text{calculated Length of Service}^{ii} \text{ Year After FSP Enrollment})$

ⁱ Arrest data is annualized

ⁱⁱ Length of Service is measured as the number of days in the Before FSP, During FSP, and After FSP Period. If the partner was still enrolled during the After period that partner gets a zero weight in the numerator and denominator.

The percent change in arrest rate was calculated to show how much arrest rates declined from Before FSP Participation to after FSP Participation by clients in partnerships' age group, sex, race/ethnicity, and county. It was calculated by subtracting the After FSP arrest Rate from the Before FSP arrest rate and dividing that result by the Before FSP arrest rate: $(\text{Before FSP rate} - \text{After FSP rate} / \text{Before FSP Rate})$.

Arrest rate changes were calculated by counties and are shown in the map.

Data Suppression:

Any cell with a count of less than 11 will be suppressed any MHSOAC Dashboard. Cells with no data in the raw data will have a value of 0 in the dashboard. If only a single cell in a demographic group has a count less than 11 then the next lowest cell, or 0 count cell, will also be suppressed. The algorithm searches for a 0 count cell first to suppress and then moves to the next lowest cell size for suppression. This is done so that the suppressed cell value cannot be backed into using the remaining data.