California Department of State Hospitals Conditional Release Program (CONREP) Effectiveness Study

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Executive Summary

Supervised outpatient treatment following release from institutions such as forensic hospitals or prisons, also known as Conditional Release Programs (CONREP), have consistently been shown to effectively reduce criminal recidivism and improve

forensic patient outcomes in the United States and internationally. California CONREP effectiveness studies and reports have been congruent with these findings.

The current study updates earlier California CONREP reports, examining a five-year subset of a seventeen-year data set. It compares the overall, violent crime and sex crime rearrest rates of patients who were released from a California state hospital directly to the community (Direct Discharge) with patients released from a state hospital into CONREP (CONREP Treated). The study included patients released between the years 2012 and 2017 and followed them to 2018.

The sample included 2,613 patients committed to the state hospital with the Offenders with Mental Disorders (OMD), Not Guilty by Reason of Insanity (NGI), and Sexually Violent Predator (SVP) Legal Classifications, who were discharged during the study time period. Patients for the sample were identified through the California Department of State Hospitals (DSH) and California CONREP electronic tracking systems. The sample data set was then linked to California Department of Justice (DOJ) arrest and prosecutions data for the relevant years.

The study examined the relationship of key factors to rates of first rearrest, including treatment status (Direct Discharge vs. CONREP Treated); legal classification; time in the community; gender; race; age; hospital length of stay (LOS); psychiatric diagnosis; and offense severity. By including patients discharged over a five-year timeframe, the study was able to observe patients in three groups; those with at least one year; three years; and five years post discharge and identify corresponding rearrest rates within those time intervals for each of the groups (one-, three-, and five-year fixed recidivism). Survival analysis for all patients permitted analysis of time until arrest.

Fixed recidivism rates for CONREP Treated patients were consistently, significantly lower than recidivism rates for Direct Discharge patients. Lower recidivism rates for CONREP Treated patients were found for the groups with one, three-, and five-years post discharge for the corresponding time intervals and over the course of the study. These lower rates held for each offense category: any arrest, violent crime, and sex offense arrests. The probability of any rearrest was between four to seven times more likely for the Direct Discharge patients than for the CONREP Treated patients in this sample. Additionally, the probability of recidivism for a violent crime was between four to seven times more likely for the Direct Discharge group; Similarly, the probability of recidivism for a sex offense was four and a half to six times more likely among those in the Direct Discharge group.

Specifically, the probability of any rearrest for Direct Discharge patients compared to CONREP Treated patients after release from the state hospital was seven times higher at one year, four and a half times higher at three years, and five times higher at five years. The probability of rearrest for a violent crime for Direct Discharge

patients compared to CONREP Treated patients after release from the state hospital was seven and a half times higher at one year, four times higher at three years, and more than six times higher at five years. The probability of rearrest for a sex crime for Direct Discharge patients compared to CONREP Treated patients after release from the state hospital was four and a half times higher at one year and six times higher at three years. The probability could not be calculated because there were no arrests in the CONREP Treated group at five-years, though the rate for Directly Discharge arrest rate (8.4 percent) remained much higher.

The factors related to rearrest and Direct Discharge overlapped. This suggests that expanded access to CONREP programs more would reduce recidivism for patients discharged from the state hospitals overall. For example, easing CONREP release criteria could enable DSH to place the patients most vulnerable to rearrest and most in need of services into CONREP, rather than directly into the community through courts or other means. In 2021, DSH began expanding CONREP and its continuum of care, meaning more patients will have the benefits of CONREP treatment. DSH expects that public safety and reduced use of criminal justice resources will result.

The effects of CONREP Treatment varied by Legal Classification, with those in the OMD groups showing the highest rates of rearrest, and those in the SVP group showing the lowest rates of rearrest in all re-offense categories. The differences in rearrest rates among Legal Classifications were lower in the CONREP Treated group, showing that CONREP treatment exerted its strongest effects in the Legal Classifications most prone to high rearrest rates.

Of those patients who were eventually rearrested, CONREP Treated patients remained in the community significantly longer before rearrest, even after CONREP release, than did Direct Discharge patients before rearrest. As such, the effects of CONREP treatment and the supported re-integration into the community it provides may linger even after active CONREP treatment. Additionally, longer lengths of CONREP stay were associated with lower recidivism. This suggests a dose-response effect, showing a relationship between the duration (dose) of treatment) and better outcomes. This effect highlights the critical need for the planned expansion.

The CONREP Treated group had an older mean age; longer hospital lengths of stay; higher proportions of patients with non-minority race/ethnicity status; and more patients of female gender than the Direct Discharge group. Patients in the CONREP Treated group were less likely to have had a previous state hospital commitment; less likely to have a paraphilic or antisocial personality disorder and more likely to have a psychotic disorder than patients in the Direct Discharge group. Differences in composition between these groups may partially explain the magnitude of the difference in rearrest rates and time to rearrest.

Patients who were placed in CONREP were significantly more likely to have the following characteristics,: Not OMD Legal Classification (this relationship was robust), female gender, psychotic disorder, fewer commitments in the study period, and higher commitment offense severity.

Patients who were rearrested were significantly more likely to have the following characteristics: Directly Discharged into the community, younger age, more commitments in the study period, lower commitment offense severity, OMD Legal Classification, and male gender.

Limitations: Arrests are incomplete measures of effectiveness, and information in the data sets may contain inconsistencies and inaccuracies. The data was not analyzed for specific interactions and effects of all variables.

Description of CONREP in California

CONREP is a statewide system of community-based services for select patients discharged from the state hospitals.[1] All CONREP patients are ordered into the program by a court or administrative law hearing. The goal of the program is to ensure public safety, while transitioning forensic state hospital patients back into the community.

CONREP includes a wide range of supervisory and mental health services. These include case management, individual and group therapy, medication management, substance abuse screening, home visits, and coordinated links to additional services, according to need. Patients are placed into housing arrangements with varied levels of supervision, ranging from independent housing to a locked facility. Intensity of services and levels of monitoring are tailored to individual treatment needs and potential dangerousness. Services are most intensive upon discharge from the hospital and are tapered as the patient progresses through the program and demonstrates successful and safe community living.

A vital supervision tool for public safety is revocation of the patient's CONREP status. With a revocation, the CONREP home program petitions the court to order the patient's return to the state hospital. The most common reasons for initiating a revocation include decompensation of mental health condition requiring inpatient hospitalization, increased dangerousness potential, and failure to adhere to the terms and conditions of release. Additionally, individuals may be revoked for commitment of a new offense. Patients can also temporarily be admitted to the state hospital for treatment of psychiatric decompensation.

[1] In the case of some Incompetent to Stand Trial Commitments, the release can be from a jail.

Purpose of Effectiveness Study

Penal Code (PC) 1617 directs DSH to study the effectiveness of the CONREP program. Specifically, PC 1617 states,

> The State Department of State Hospitals shall research the demographic profiles and other related information pertaining to persons receiving supervision and treatment in the Forensic Conditional Release Program. An evaluation of the program shall determine its effectiveness in successfully reintegrating these persons into society after release from state institutions. This evaluation of program effectiveness shall include, but not be limited to, a determination of the rates of re-offense while these persons are served by the program and after their discharge. This evaluation shall also address the effectiveness of the various treatment components of the program and their intensity.

The purpose of the current research program is to examine the effectiveness of the CONREP program as indicated by recidivism rates and variables affecting those rates for state hospital releases between 2012 to 2017.

Summary of the Method

This report presents the results of the CONREP Effectiveness study, the first of its kind since 2002. This report includes an examination of a five-year subset (2012 to 2017) of adult forensic patients discharged from California state hospitals between 2002 and 2017. It evaluates the program's effectiveness by comparing community recidivism rates of patients with CONREP treatment to a group of patients without CONREP treatment. Specifically, it compares rearrest rates for patients released from the state hospital who were treated in CONREP (CONREP Treated) to those of discharged directly from the hospital into the community and did not receive CONREP treatment(Direct Discharge). Additionally, DSH examined the potential effects of other factors and linked DSH patient discharge data to arrest data from the California DOJ. Outcomes included general, violent, and sex offense recidivism. The effects of time in community for both groups on outcome was also examined. This study augments the research base of CONREP programs in general, updates earlier California data and provides a nuanced analysis of California-specific commitments and populations.

This was a data only study; administrative data sets were used and a waiver of informed consent was obtained via the IRB process. The sample consisted of all forensic hospital patients in the selected commitment categories (N=2,613) who were discharged from the state hospital between January 1, 2012 to January 1, 2017. The sample included 602 CONREP Treated patients (a subset of 40 of which had been only treated in CONREP in the past), which was compared to 2,011 patients

who directly discharged into to community and had not had CONREP treatment (Direct Discharge). Over the five-year time span, 45 deaths were recorded.

This project was approved by the California Committee for the Protection of Human Subjects and the DSH Research Committee. The California DOJ Research Division authorized the release of these data and reviewed the data for risk of re-identification and determined the risk to be very low. DSH reviewed the data for re-identification risk using the California Health and Human Services Data Deidentification Guidelines and approved the results for release and potential publication.

Summaries of Previous CONREP Effectiveness Reports

Earlier CONREP effectiveness studies are examined below. The methods and variables of these studies varied, including follow up periods, use of comparison groups, use of demographic and patient characteristics, duration of follow-up, and placement status. They also used divergent outcome measures, including patient functioning and patient satisfaction, hospitalizations, revocation and rearrest rates, and follow-up duration and placement status.

Effectiveness Report - 1990

The first CONREP recidivism study was a longitudinal follow up of 710 CONREP patients compared to similar forensic populations in the literature and a small state hospital sample that was directly discharged. Of the group, more than 80% had a violent commitment offense. Their most common primary diagnosis was schizophrenia. Approximately 66% of the sample were White, and 85% were male. Findings suggest that rearrest rates for CONREP patients overall were 8.3% after one year, 13.2% after two years, and 16.7% after three years. Of the 91 reoffenders, 46.2% had a violent re-offense. Rearrest rates of a subset of the CONREP sample (N=193 patients) who were discharged from DSH-Patton into CONREP were compared to a sample (N=45 patients) of DSH-Patton patients who were directly discharged to the community. Rearrest rate of CONREP patients was 6.7%, compared to a directly discharged sample rearrest rate of 27.3%**.** Those in the Mentally Disordered Sex Offenders (MDSO) Legal Classification had fewer numbers of arrests and lower rates of rearrests than other categories. However, the seriousness of their arrest and rearrest charges were higher. Re-offense rates were similar to or below other states' forensic populations. This study also looked at other clinical and quality of life factors. Regarding outcomes, 56.3% of clients were still in the program at the two-year mark, 9.8% had completed the program, and 21% had been revoked to state hospitals. Younger age, higher number of prior arrests, and Black racial/ethnic background were related to re-offense.

Effectiveness Report - 1993

This longitudinal study compared 1,159 CONREP patients (1986 to 1992) to directly discharged patients. The patients in this study were mostly White (60 %) and male (85%) with an average age in the 30s and schizophrenia as the most common diagnosis (40.7). Most CONREP patients (80%) had a violent commitment offense and had Legal Classification of NGI. The overall rearrest rate among CONREP patients of all Legal Classification was 5.6% per year. The CONREP group had a significantly lower rate of rearrest in the community than did the directly discharged group, but seriousness of arrest charges was approximately the same. Rates of rearrest after CONREP discharge was 6.8% at one-year post discharge, 9.4% at 2-year post discharge, and 19% at 3-year post discharge. The violent re-offense rate

was 50%. Of the Legal Classifications, rearrest rates for those deemed Incompetent to Stand Trial (IST) was the highest at 18.2%, followed by 5% for MDO classification, now known as Offenders with Mental Health Disorders (OMD), and 4.8% for NGI, and 4% for MDSO. OMDs had the highest number of prior arrests compared to other legal classes. Rehospitalization rates increased as patients spent more time in CONREP. Rehospitalization was higher for CONREP because of the revocation/rehospitalization mechanism. Seventy-five percent of revocations involved incidents of AWOL, decompensation, non-compliance, and threats, which may have prevented more serious crimes from occurring. Patients were rated significantly higher at first anniversary than at program entry on three scales: Employment, Social Support, and Independence & Compliance.

Effectiveness Report - 1998

This report was a re-analysis of previous CONREP Effectiveness studies. Findings suggested that the average hospital LOS was 12.7 years for NGI, 4.5 years for MDSO, and 1.4 years for OMD. Average LOS in CONREP was 6.95 years for MDSO, 3.5 years for NGI, 0.92 years for IST, and 0.83 years for OMD. NGI patients spent more time in a hospital setting prior to CONREP placement (average 4.5 years) and they spent more time in CONREP aftercare treatment (average 3.5 years). After positive discharge (restored to sanity) from CONREP, former NGIs had a 20.0% chance of rearrest over a period of four years after their release, but more serious re-offense crimes. OMDs had a nearly 40.0% rearrest rate within two years of leaving CONREP. The revocation rate for CONREP patients was 20.4% at one year of community exposure. The overall revocation rate for CONREP patients was lower than that of Oregon's (25.8 %), but higher than New York's (14.5%). The budgeted cost of CONREP per patient per year was $21,879 in 1997. CONREP patients received intensive treatment in the community at a cost that was approximately 20% the cost of placement in a state hospital. Additionally, CONREP re-offense rates were significantly less than the re-offense rate of a comparison group of patients who left hospitals in the past, but without CONREP aftercare.

Effectiveness Report - 1999

This study is a re-analysis of the 1998 Effectiveness Report. It included three new variables: the proportion of time CONREP patients spent in the state hospital, key indicators of community adjustment, and patient satisfaction with the program (102 CONREP patients). There was no comparison group. Arrest rates were not examined. Commitment types were not compared. The study found that during this period, CONREP patients spent 50.2% of time in CONREP, 20.3% in a state hospital, and 29.5% of time in the community without either CONREP or state hospital care. Patients expressed high overall satisfaction with their programs and therapists. Employment and social support gains were the same for the 1999 patients as for the 1993 patients.

However, the gains in independence and compliance that were found for the 1993 patients were not found for the 1999 patients. The level of risk and dangerousness for the 1999 CONREP group at initial placement was higher. However, after one year of CONREP treatment, scores indicated a substantial reduction in risk and dangerousness levels. This study reported a trend is in which CONREP patients had poorer functioning upon admission to CONREP compared to previous years. However, these patients still made significant gains in several important areas during their first year, similar to earlier cohorts.

Effectiveness Report - 2002

This study examined rearrest rates for 2,101 CONREP patients discharged from the state hospital between 1986 and 2001. It also examined hospital return rates for NGI CONREP patients for the year 2002 and looked at changes in functioning in several domains. For this sample, the average state hospital LOS prior to CONREP was 5.46 years for MDSOs, 4.25 years for NGI, 1.35 years for OMDs, and 0.94 for ISTs. 77% of NGI patients had been committed to the hospital for violent offenses. By statutory definition, all OMDs and SVPs had a violent offense. The overall rearrest rate after one year was 8.9%. Revocation rates for 2002 showed that 17% of CONREP NGI patients had to be returned to the state hospital, during one year of CONREP treatment. The reasons for hospital return included decompensation (6.4%), noncompliance with treatment (9.3%), and symptoms regarded as dangerous (1.9%). This study found a downward trend in initial functioning scores between the 1999-2002 groups and the 1993-1999 group. Employment and social support gains were significant, a similar finding to the 1999 study. There was also a statistically significant improvement in client functioning in substance abuse (less use) between program entry and one year in the program. The budgeted cost per patient in CONREP in 2001-2002 was $20,100.

Sample Composition

The following table provide information about the composition of the current sample studied:

Characteristic	Tally	Rate
Total	2,613	
Gender		
Male	2,369	90.7 %
Female	244	9.3%
Age	M: 42.89 Range: 20.43 to 90+	
Race-Ethnicity		
White	1,025	39.2%
Black	769	29.4%
Hispanic	640	24.5%
Asian Pacific Islander	110	4.2%
Indigenous & Other	69	2.1%
Hospital Length of Stay in Days (LOS)	M: 1,050.6 Range: 20 to 9,962	
Commitment Offense Category		
Violent	2,032	77.8 %
Non-Violent	294	11.3%
Sex Offense	275	10.5 %
Legal Classification		
OMD (MDO) Parole	1,509	57.7%
OMD (MDO) Civil	386	14.7%
NGI	584	22.3%
SVP (+1 MDSO)	134	5.1%
Commitments in the Study Period		
1	2,224	85.1%
2	366	14.0%
3-4	23	0.8%
Diagnostic Category		
Psychotic Disorder	1,834	70.2%
Bipolar Disorder	305	11.6%
Depressive Disorder	84	3.2%
Paraphilic Disorder	145	5.5%
Any Substance Use Disorder	1,806	69.1%
Any Antisocial Personality Disorder	159	6.1%

M= Mean (Average)

Definitions of Factors Explored

Treatment Status

CONREP Treated: Patients who were discharged to CONREP within the 5-year period as a subset of the group that was discharged after January 1, 2012. Active CONREP is a subset of CONREP Treated patients who were actively in CONREP at the time of their rearrest.

Direct Discharge (or Directly Discharged): patients who were discharged directly from the state hospital into the community on or after January 1, 2012

without being treated in CONREP, as a subset of the group that was discharged within the five-year period.

Legal Classifications as Defined by California Statute

Offender with Mental Health Disorder-Parole (OMD Parole), PC 2962: Those committed under the OMD (formerly known as the Mentally Disordered Offender (MDO) statute, California PC 2962, are treated at the state hospital, after serving a prison sentence, as a condition of parole. The Board of Parole Hearings (BPH) certifies patients for these commitments. Patients in this category meet the following criteria: they committed a violent offense; they have a severe mental health disorder; the severe mental disorder was a factor in their offense; the severe mental health disorder is not in remission; and they are dangerous by reason of their severe mental health disorder, among other conditions. An individual committed under this Legal Classification can be directly discharged from the state hospital to the community without CONREP treatment at any time if a court finds they no longer meet criteria. An individual who continues to meet OMD criteria but has been deemed able to be safely and effectively treated in the community can be released to CONREP. They must also meet several "release to CONREP" criteria to meet this determination. There is no established time frame (before the end of the parole period) for an individual to remain in CONREP before they can be decertified. Patients in this classification can be released when a Superior Court grants an appeal of their BPH certification.

Offender with Mental Health Disorder-Civil (OMD Civil), PC 2972: These are patients who remain dangerous and have a serious mental illness that is not in remission after the end of the parole period. The hospitals' discharge and release to CONREP criteria in this classification are the same as those for OMD-Parole.

Not Guilty by Reason of Insanity (NGI), PC 1026: Patients committed as NGI are deemed by a court to be not responsible for their criminal act(s) due the impact of their mental disorder on their mental state at the time of the offense. Per California Statute, those with this Legal Classification are given a state hospital commitment term consistent with a jail or prison sentence they would have received for the commitment offense if they had been found guilty. An NGI commitment can be a determinate term or an indeterminate (or life sentence) term. After six months in the hospital, an individual can petition a judge for release to CONREP. Individuals who have not yet met their determinate sentence date or who have indeterminate sentences can be released to CONREP if they are deemed able to be safely and effectively treated in the community. The release to CONREP criteria for the NGI Legal

Classification are stricter than those for the OMD Legal Classifications. NGI patients must remain in CONREP for at least one year. After that time, they can petition a court to be deemed "restored to sanity". Time toward the term stops during the CONREP treatment period for an individual with time remaining on a determinate term. There is one path to direct discharge without CONREP: any time after a determinate term ends, an individual can be released unconditionally to the community if they do not meet criteria for extension (continued dangerousness and mental illness).

Sexually Violent Predator (SVP), Welfare and Institutions Code (WIC) 6602/6604: Patients pre-committed (WIC 6602) and committed (WIC 6604) under the Sexually Violent Predator statute are treated at the state hospital after serving a prison sentence for a sexually violent offense. They must be determined to have a diagnosed mental disorder that predisposes them to the commission of predatory sexual acts and demonstrate a serious and well-founded risk for sexual re-offense. Individuals are held at the state hospital pending this determination after the county court finds probable cause that the individual meets the criteria. Individuals can later be discharged from SVP (WIC 6602) status after a county court finds that they do not meet SVP criteria beyond a reasonable doubt. An individual can be directly discharged from the hospital when a judge determines they no longer meet the commitment criteria. A patient in this classification can also be released to CONREP when a judge deems that they can be safely and effectively treated in the community. There is no specified minimum time frame for treatment in CONREP for this classification. Note: The data set for this study did not allow for a distinction between the WIC 6602 and WIC 6604. Only those in the WIC 6604 commitment classification are eligible for CONREP.

Mentally Disordered Sex Offender (MDSO) (WIC 6300): Patients committed under this now defunct statute (repealed in 1982) were deemed to be predisposed to the commission of sexual offenses due to a mental disorder or disease. People committed in this classification were diverted to for treatment in lieu of prison.

Diagnostic Categories: In this study diagnoses were classified into general categories to facilitate analysis and make meaningful distinctions.

Substance Use: This included substance use disorder related to abuse, use, dependence, and withdrawal.

Substance Induced: This included all substance and medication induced mental disorders.

Paraphilic: This category included all paraphilic (sexual deviancy) disorders and paraphilias.

Adjustment: This included all categories of adjustment disorder or diagnoses with the term adjustment.

Personality: This included all personality disorders, including now obsolete disorders related to personality (such as passive aggressive personality disorders) and those with an organic etiology.

Cognitive: This included all dementias, regardless of etiology, and cognitive disorder. This category excluded developmental disorders.

Anxiety/Post Traumatic Stress Disorder (PTSD): This category included all anxiety disorders regardless of etiology, including Post Traumatic Stress Disorder (PTSD). PTSD was included since it had been classified as an anxiety disorder during much of the periods of hospitalization for this study and before the DSM-5 was published and the category designation for PTSD changed.

Developmental: This category included disorders arising in the developmental period, including autism spectrum disorders; intellectual disability, including the now obsolete mental retardation, and learning disabilities.

Psychotic: This category included all psychoses, excluding substance-induced psychosis, and depressive or bipolar disorder with psychotic features. Schizoaffective disorder was included in this category.

Depressive: This category included all depressive disorders, except substance induced depression or mood disorder.

Bipolar: This category included all bipolar, manic and mania diagnoses, except substance induced bipolar disorder or manic symptoms.

Other: Disorders in this the category included infrequently encountered diagnoses (such as pica and malingering) and excessively vague or non-standard entries (e.g., "unspecified mental disorder").

"Any" ___ Disorder: When present as a primary or secondary diagnosis, the below disorders were identified and coded as a separate variable. This ensured DSH captured diagnoses most potentially relevant to recidivism when present, even if they were not the primary focus of clinical attention. These categories conformed to the definitions above, except as noted below.

Any Substance Use Disorder;

Any Paraphilic Disorder;

Any Antisocial Personality Disorder (ASPD): any ASPD diagnosis;

Any Personality Disorder: any personality disorder diagnosis, including ASPD;

Any Major Mood Disorder: bipolar and depressive disorders were combined;

Any Psychotic Disorder; and

Any Developmental Disorder.

Lengths of Stay (LOS)

CONREP LOS: This includes any time spent in CONREP in outpatient status. Time spent on temporary state hospital admission is not included in this LOS. LOS is measured in days.

Hospital LOS: This includes all inpatient days prior to discharge from the index commitment; days spent on temporary admissions to the state hospital from CONREP were added into overall length of hospital stay to distinguish inpatient time from days in the community. LOS is measured in days.

Recidivism Categories

Recidivism (or any recidivism): Recidivism is defined as the first arrest event in the community indicated on the DOJ data. This includes any arrest for a violent, non-violent or sexual offense. Note: This data may exclude out of state arrests and arrests while on inpatient status. Arrests were chosen as a more likely indicator and thus more sensitive measure than convictions. The prolonged periods often required for convictions and variable conviction rates among jurisdictions also made arrests the more viable indicator.

Violent: Offenses include crimes that led to or posed a threat of physical injury or death, contact sex offenses, and actual or implied threats of violence.

Nonviolent: Offenses include crimes that do not ordinarily lead to or threaten physical harm to others. This included property crimes, drug offenses, and non-contact sex offenses.

Sexual: Offenses includes any sex offense within the first arrest event, even if another offense was rated as the most severe.

Recidivism Offense Severity: Refers to the most severe offense tied to an arrest incident as rated on an 8-point scale, with 1 being the least and 8 being the most severe. In the case of arrests for multiple offenses, the most severe was selected for the purpose of analysis based on the categories and levels of severity.

Recidivism Comparisons

The study examined fixed recidivism rates for any offense, violent offenses, and sexual offenses on key variables, including Treatment Status (Direct Discharge and CONREP Treated) and Legal Classification. Rates were computed by identifying the number of patients in these categories who were still alive post discharge at one-, three-, and five-year intervals, identifying the number of patients in those groups who were arrested (for the relevant offense type) in those time periods, then calculating the percentage of those arrested in the relevant time period for each group. The first post discharge arrest events (and the more severe crime within each event) were used for these tallies for the purpose of comparing rates of the groups created by these variables and time frames.

One-, Three-, and Five-Year Fixed Recidivism Explained

Fixed recidivism rates reflect the percentage of individuals who recidivated within a group of individuals post discharge and not recommitted to the hospital for a specified number of years. It permits examination of the rates at specified year intervals when individuals in a study have widely divergent periods of time in the community. In other words, it allows us to examine recidivism rates for longer durations, even when all individuals in a study have not been in the community for that duration. Individuals without enough time in the community can simply be removed from the group.

Fixed recidivism rates provide a way to show how time in the community can affect recidivism with simple descriptive statistics. It does this by showing the rates for groups with different amounts of community exposure and recidivism opportunity. In this study, the specified year periods were measured by number of days, counted from each patient's discharge date to the DOJ data capture date.

This study sampled patients who were discharged between the years 2012 and 2017. Each patient had a different discharge date. Consequently, some patients were followed for the entire five-year interval, but many were not, while all patients were followed for at least one year. Therefore, the one-year interval has the greatest number of subjects (2,599), while the five-year interval has the fewest subjects (588).[2] As such, the recidivism rates for any particular year between 2012 and 2017 are not captured. Note: Known deaths were removed from the calculation for the corresponding interval. The rate usually, but not necessarily, increases over the time intervals; Most patients who recidivate will recidivate before the third year. Further, an arrest of a patient four years after discharge will not be captured in the one-and three-year fixed recidivism periods. Fixed recidivism rates may not increase for each fixed time because the group composition will vary. Fixed recidivism rates allow us

[2] Known deaths were removed from the calculation for the corresponding interval.

to meaningfully compare the recidivism rates; the formula calculates a ratio of recidivism for each time period presented.

1. The one-year fixed recidivism rate was the ratio of the number of arrests within one year after release divided by the 2,599 total patients who had at least one year of follow-up after release within one year of release. This particular group included all patients (for this group, all patients in the study) released any time between January 1, 2012 to January 1, 2017.

One-year Fixed Recidivism Rates =

Number of patients arrested within 365 days who had at least 365 days after discharge at the end of the study follow up period.

Number of patients with at least 365 days after discharge at the end of the follow up period.

2. The three-year fixed recidivism rate was the ratio of the number of arrests divided by the (1,557) total patients who were released by 2015 at the latest.

Three-year Fixed Recidivism Rates =

Number of patients arrested within 1,095 days who had at least 1,095 days after discharge at the end of the study follow up period.

Number of patients with at least 1,095 days after discharge at the end of the follow up period.

3. The five-year fixed recidivism rate was the ratio of the number of arrests divided by the (588) total patients who were released prior to201.

Five-year Fixed Recidivism Rates =

Number of patients arrested within 1,825 days who had at least 1,825 days after discharge at the end of the study follow up period.

Number of patients with at least 1,825 days after discharge at the end of the follow up period.

Results by Treatment Status

Comparing Recidivism Rates of Direct Discharge and CONREP Treated Patients

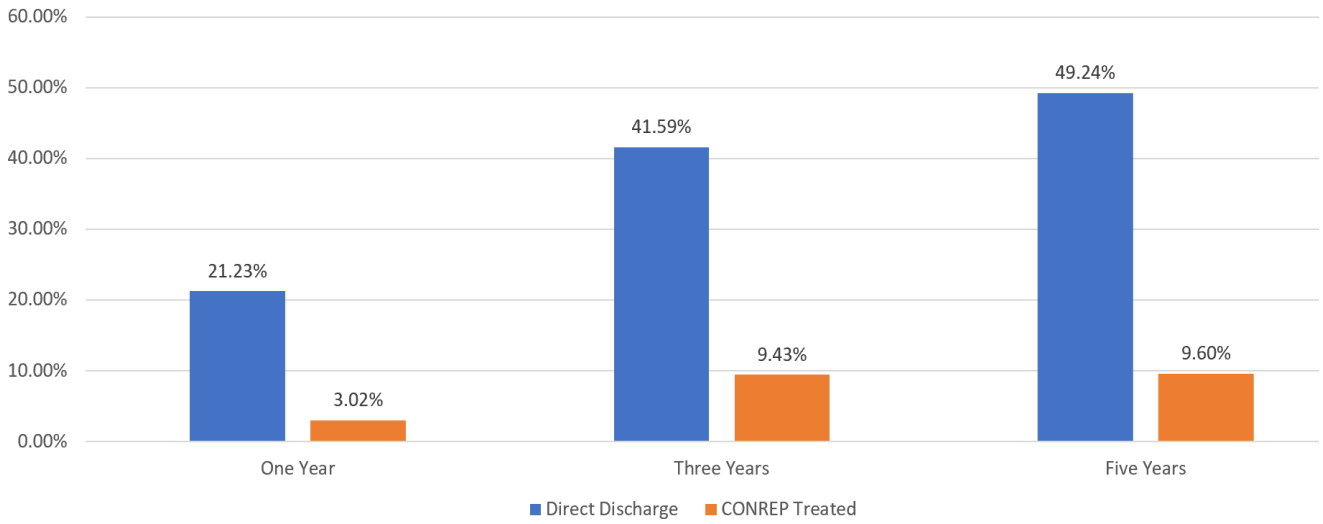
Figure 1 graphically compares the fixed recidivism rates by treatment status, including rates for Directly Discharged and CONREP Treated patients for the groups with one-year, three-years, and five-years post discharge. It shows the following:

- Within 1 year of release from the state hospital, the probability of rearrest among Direct Discharge patients was seven times higher than the probability of rearrest among CONREP Treated patients;
- Within 3 years of release from the state hospital, the probability of rearrest among those who were Direct Discharge was about four and a half times higher than the probability of rearrest among CONREP Treated patients; and

  Within 5 years of release from the state hospital, the probability of rearrest among those who were Direct Discharge was five times higher than the probability of re-arrest among CONREP Treated Patients.

Statistical analysis shows all the differences in recidivism rates shown below between Direct Discharge vs. Conrep treated are significant and meaningful, and not due to chance.

Figure 1. Fixed Recidivism Rates by Treatment Status



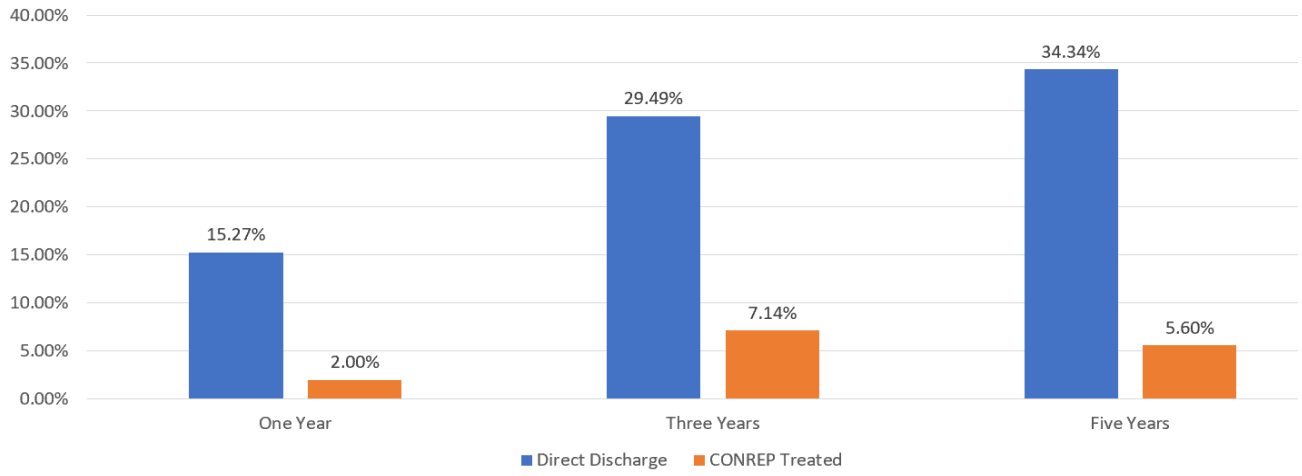
Comparing Violent Recidivism Rates of Direct Discharge and CONREP Treated Patients

Figure 2 compares the fixed recidivism rates for a violent offense in the first arrest event by treatment status, including directly discharged and CONREP Treated patients for the groups with one-year, three-years, and five-years post discharge. It shows the following:

- Within 1 year of release from the state hospital, the probability of rearrest for a violent crime among Direct Discharge patients was seven and a half times higher than that of CONREP Treated patients;
- Within 3 years of release from the state hospital, the probability of rearrest for a violent crime among Direct Discharge patients was four times higher than that of CONREP Treated patients; and
- Within 5 years of release from the state hospital, the probability of rearrest for a violent crime among Discharge patients was more than six times higher than that of CONREP Treated patients.

Statistical analysis shows all the differences in recidivism rates shown below between Direct Discharge vs. Conrep treated are significant and meaningful, and not due to chance.

Figure 2. Fixed Recidivism Rates for Violent Offenses by Treatment Status



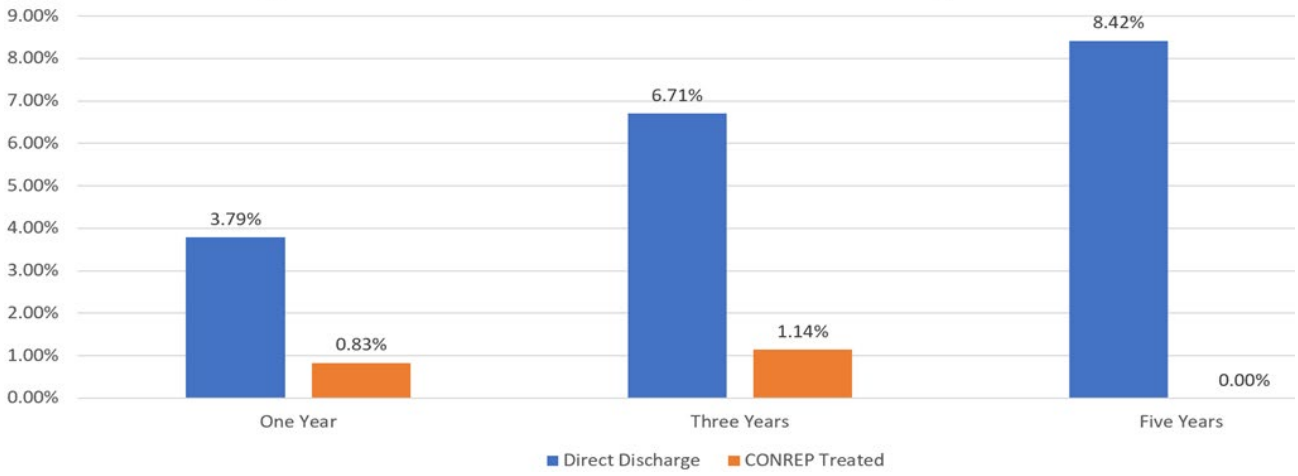
Comparing Sex Offense (Fixed) Recidivism[3] Rates of Direct Discharge and CONREP Treated Patients

Figure 3 compares the fixed recidivism rates for the first rearrest for a sex offense by treatment status, including Directly Discharged and CONREP Treated for the groups with one-year, three-years, and five-years post discharge. It shows the following:

- Within 1 year of release from the state hospital, the probability of first rearrest for a sex crime among Direct Discharge patients was four and a half times higher than that of CONREP Treated patients;
- Within 3 years of release from the state hospital, the probability of a first rearrest for a sex crime among Direct Discharge patients was about six times higher than that of CONREP Treat patients; and
- Within 5 years of release from the state hospital, the rate of first rearrest for a sex crime among Direct Discharge patients was much higher than rearrest for CONREP Treated patient because CONREP Treated patients had no such rearrests. (The probability could not be calculated due the number of re-arrests being zero).

Statistical analysis shows these differences are significant and not due to chance.[4]

Figure 3. Fixed Recidivism Rates for Any Sex Offense by Treatment Status



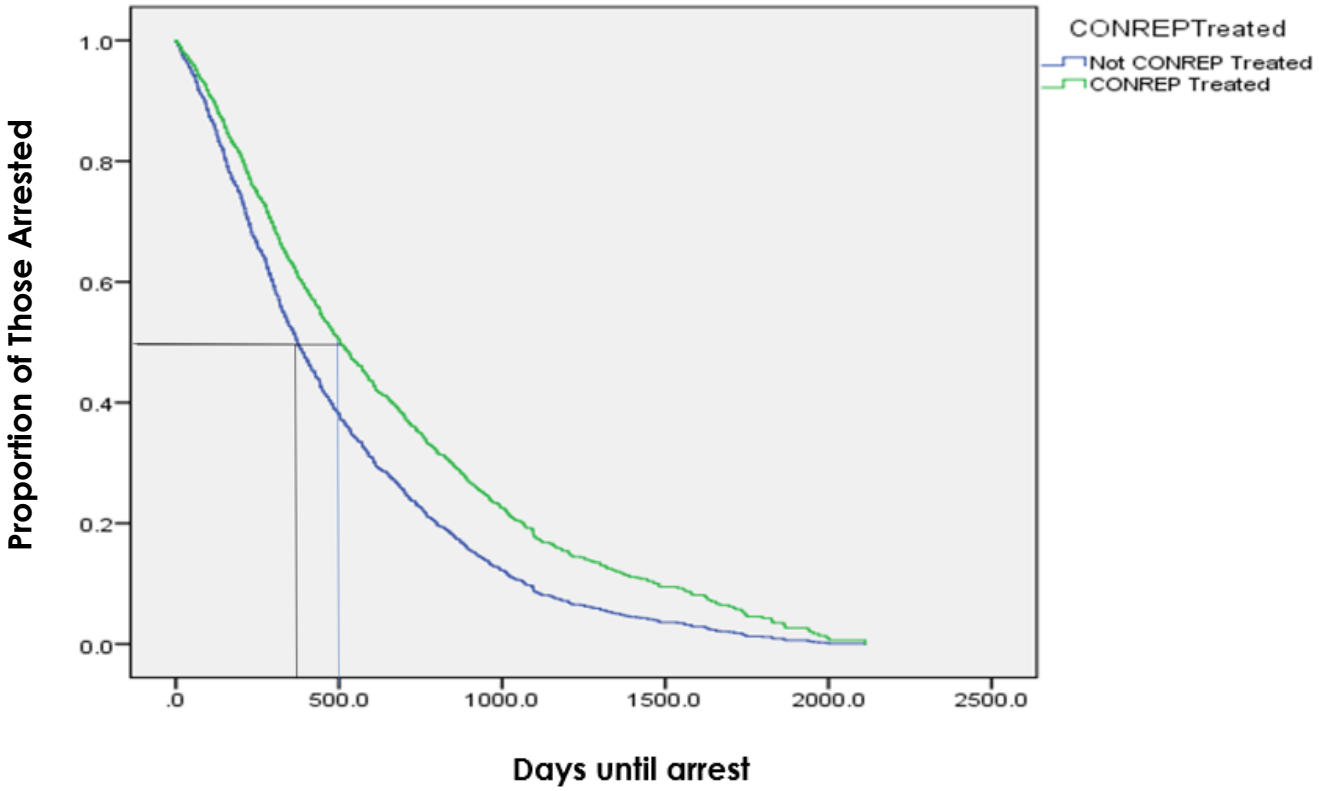
[3] Any sex offense in the first arrest event post hospital discharge.

[4] Note that this analysis has the potential to underrepresent the rate of sex offenses over time, since it only includes the first arrest. Any arrest for a sex offense during CONREP treatment would result in revocation of CONREP status and removal from the community (to the hospital or prison or jail) and the average LOS for SVPs in CONREP is more than 4-years, so any underestimation would be less pronounced in the CONREP Treated group; this would hold true for violent crimes as well. Nevertheless, overestimation for this result is unlikely, given that research shows the five-year sex offense recidivism rates (as measured by a mix of either arrests of convictions) in California are 6% for individuals on probation and parole (Lee & Hanson, 2021).

Time to Arrest

Those CONREP Treated patients who were arrested, remained in the community before arrest significantly longer than the Direct Discharge patients who were arrested. Those in the CONREP Treated group who recidivated were arrested significantly later than those in the other legal classes. The figure below shows that half of those who were arrested in the CONREP Treated group were arrested within 500 days. Half of those arrested in the Direct Discharge group were arrested within about 400 days.

Figure 4: Days until Arrest for CONREP Treated and
Directly Discharged (not CONREP Treated) Patients who Recidivated

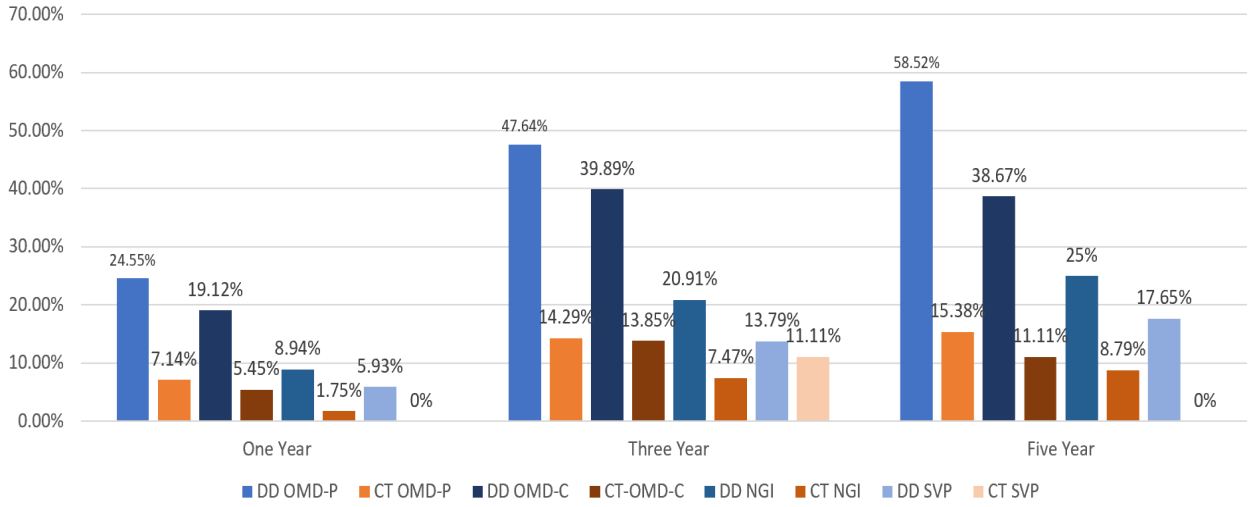


Comparing Recidivism Rates by Legal Classification and Treatment Status

Recidivism rates varied by both Legal Classification and Treatment Status. Figure 5 shows fixed recidivism rates for the one-, three-, and five-year periods by Legal Classification. The CONREP Treated patients recidivated at lower rates for all Legal Classifications for each time period. Direct Discharge (DD) patients are depicted by shades of blue, and CONREP Treated patients are depicted by shades of orange.

Figure 5. Fixed Recidivism Rates by Legal Classification and Treatment Status

(Direct Discharge Blue Shades; CONREP Treated Orange Shades)



DD= Direct Discharge; CT-CONREP Treated; OMD-P=OMD Parole; OMD-C=OMD Civil

Overall, for both Treatment Status categories and each time period, OMD Parole patients were the most likely to recidivate, followed by OMD Civil patients, then by NGI patients. SVP patients were least likely to recidivate each time period. Larger discrepancies are likely associated with true underlying differences in the groups sampled.

Impact of Legal Classification and Treatment Status Combined

Because different recidivism rates for the Legal Classifications were observed, statistical analysis was conducted to explore differences in recidivism rates (over the study time period) with respect to Legal Classification and Treatment Status. There was a significant association between both Treatment Status and Legal Classification and rearrest. For the entire sample, there was a significant association between Legal Classification and rearrest. However, when the sample was divided into Direct Discharge and CONREP Treated patients the association was only present among Direct Discharge patients. Among CONREP Treated patients, the relationship was not significant. This result suggests that CONREP may mediate the risk associated

with Legal Classification. In other words, CONREP treatment appears to buffer the impact of Legal Classification on recidivism.

Legal Classification Group Differences

Because recidivism rates among the OMD Parole, OMD Civil, NGI, and SVP Legal Classifications were so different, we considered whether group differences on other factors could have affected these outcomes. The table below displays these differences:

	OMD-Parole	OMD-Civil	NGI	SVP
Any Substance Use Disorder	71%	75%	67%	44%
Any Antisocial Personality Disorder	7%	4%	5%	10%
Any Personality Disorder	8%	6%	9%	15%
Any Developmental Disorder	3%	3%	1%	0%
Any Paraphilic Disorder	3%	5%	.05%	91%
Male Gender	95%	85%	80.7%	100%
Age at Hospital Discharge	M: 39.4 Range: 20-79 SD: 10.7	M: 45.46 Range: 24-83 SD: 10.4	M: 46.62 Range: 20-90 SD: 12.68	M: 56.97 Range: 30-92 SD: 10.68
Commitment Offense-Severity	M: 8.23 Range: 4-11 SD: 1.9)	M: 8.47 Range: 4-11 SD: 1.95	M: 8.99 Range: 4-11 SD: 2.06	M: 9 Range 9 SD: 0
Hospital LOS	M: 357.37 Range: 20-2160 SD: 300.16	M: 1706.48 Range: 76-6244.0 SD: 1108.73	M: 2141.26 Range: 21-9962.0 SD: 1743.02	M: 2213.06 Range: 78-3674.0 SD: 891.83
Number of Commitments	1=78% 2=20.7% 3=1.1% 4=0.3%	1=92% 2=7% 3=0.5% 4=0.3%	1=95.5% 2=4.5% 3=0 4=0	1=99.2% 2=0.8% 3=0 4=0

M= Mean (Average)
SD=Standard Deviation (A measure of the spread of scores from the mean.)

Statistical analysis revealed the following differences among the Legal Classification Groups:

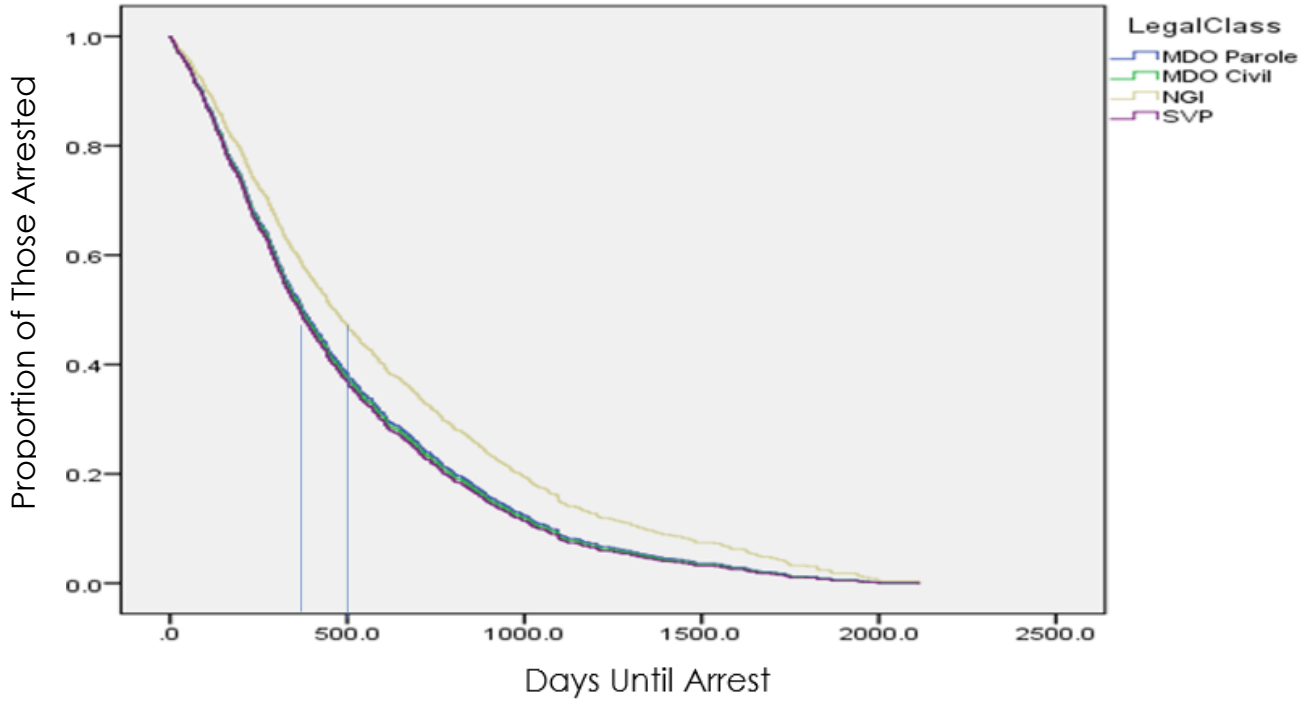
- The SVP Legal Classification group had a significantly lower rate of substance use disorder and higher rates of Any Antisocial Personality Disorder, Any Personality Disorder , and Any Paraphilic Disorder diagnoses.
- The rates of Any Developmental Disorder significantly varied among the Legal Classifications;
- The OMD Parole and SVP Legal Classifications had significantly higher rates male gender patients;
- The mean Commitment Offense Severity for OMD-Parole and OMD-Civil Commitment Offenses were similar but were significantly lower than those of both the NGI and SVP. The NGI and SVP Commitment Offense Severity were nearly equivalent;

- The OMD Parole patients were significantly younger at discharge and SVP patients were significantly older than those in other Legal Classifications. The mean age of OMD-Civil and NGI Legal Classification were similar;
- The patients in the OMD Parole classification had significantly shorter Hospital Lengths of Stay than patients in the OMD Civil classification. Patients in the NGI and SVP Legal Classifications had similar mean Hospital Lengths of Stay, and mean Lengths of Stay for the NGI and SVP groups were significantly longer than those of both OMD groups; and
- Patients in the OMD-Parole group were more likely to have had more than one separate state hospital commitment within the study period.

Legal Classification and Time to Recidivism

To examine whether Legal Classification affected how long patients who recidivated remained in the community, we conducted a survival analysis to compare time until arrest for each Legal Classification. Those in the NGI Legal Classification who recidivated were arrested significantly later than those in the other legal classes. The figure below shows that half of those who were arrested from the NGI Legal Classification were arrested within 500 days. Half of those arrested in other legal categories were arrested within about 400 days.

Figure 6: Time Until Arrest by Legal Classification



CONREP Treatment Group Analysis

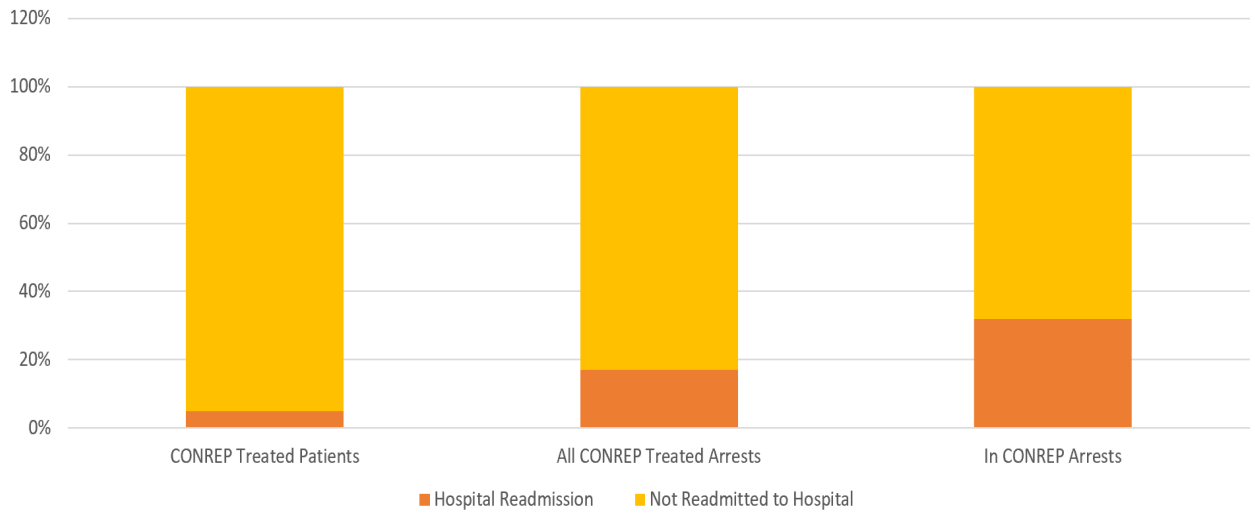
In CONREP Arrests: Only 4% of those in the CONREP Treated group were arrested while being treated in CONREP during this study. In CONREP arrests constituted 37% of all CONREP Treatment Group arrests. 7% were arrested outside of CONREP Treatment during the study period. 64% of the CONREP Treatment group arrests were made after release from CONREP.

Patients Returned to Hospital: Of those released to CONREP during the study period, 5% returned to the hospital at least once due to clinical decompensation or violation of their CONREP conditions. [5]

- A comparison of recidivism rates of CONREP Treated patients who were returned to the hospital (25.8%) and the rates of CONREP Treated patients who were not (6%) shows the probability of rearrest for those who had been returned to the hospital was slightly more than 4 times that of those who had not been returned.
- This small group (5%) of return to hospital patients accounted for a disproportionate number of arrested patients: 17% of the arrests of all CONREP Treated patients and 32% of those arrested while treated in CONREP.

Figure 7 below shows the proportion of patients in the CONREP Treated group who were returned to the hospital, the proportion of recidivism by those returned to the hospital in CONREP Treated group, and the proportion of recidivism by those returned to the hospital while being treated in CONREP.

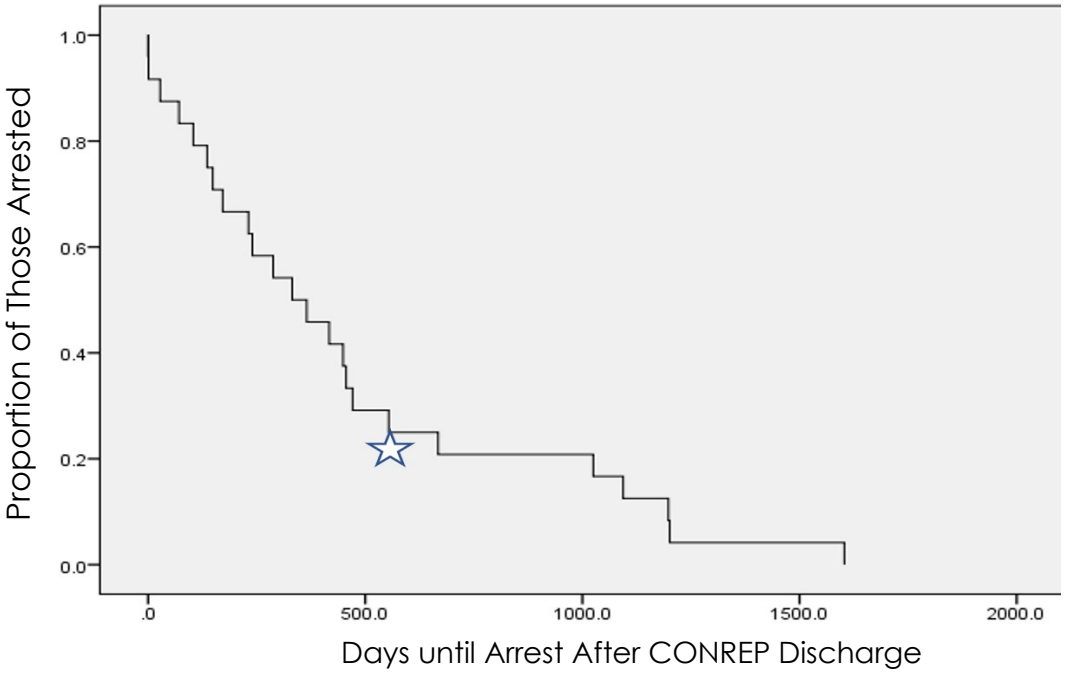
Figure 7 Proportion of all CONREP Treated Patients Returned to the Hospital; Proportion of all Arrested CONREP-Treated Patients in the Returned to the Hospital Group; and
Proportion of Patients Arrested while in CONREP in the Returned to Hospital Group



[5] When returned to the hospital for further inpatient treatment individuals are re-evaluated for CONREP.

Days to Arrest Following CONREP Discharge: To further examine the relationship between CONREP treatment and recidivism over time, DSH conducted a survival analysis. Figure 8 below shows that after discharge from CONREP, most patients who were arrested were arrested within the first year and a half. About three quarters of those who were arrested were arrested within 500 days. After that, the rate of arrests lowered substantially.

Figure 8: Days until arrest following CONREP discharge for those who were arrested. The star depicts where a substantial proportion (75%) had been arrested (about 500 days)

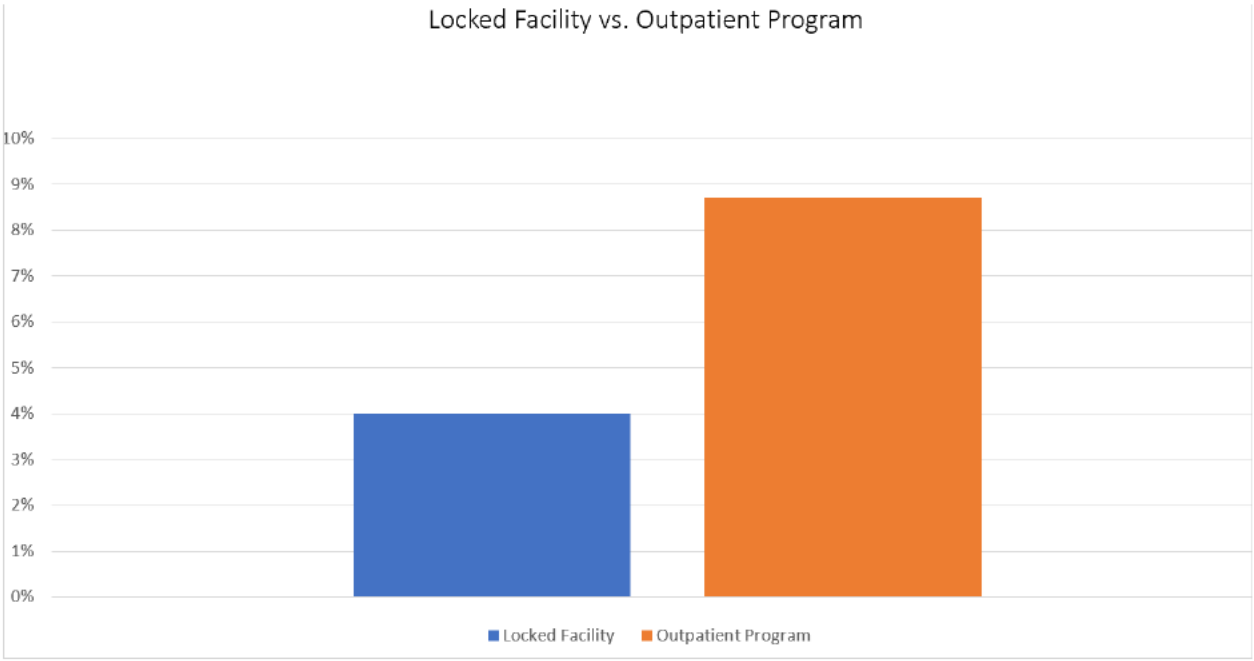


Effect of LOS in CONREP on Recidivism.

Longer lengths of stay in CONREP during the follow-up period were slightly, but significantly, correlated to lower recidivism. The mean LOS in CONREP for CONREP Treated patients who recidivated was 741.58 days (SD 547.45), while the mean length of stay for those CONREP Treated patients who did not recidivate was 913.74 days (SD 587.59). CONREP Treated patients who recidivated had shorter lengths of stay in CONREP than those who did not (average difference in 172 days) and the difference was on the cusp of statistical significance. A high level of variability in lengths of stay explains why even a six-month difference did not register as a statistically significant.

Locked Facility and Outpatient CONREP Program Differences

The recidivism for individuals discharged to locked facilities is less than half that of those discharged to regular outpatient CONREP programs. The figure below graphically depicts these programs. The low number of recidivists in the locked facility precluded valid statistical analysis.



Directly Discharged and CONREP Treated Group Differences

To explore whether differences in patient groups could partially account for the observed differences in general, violent, and fixed recidivism between the Directly Discharged and CONREP Treated patient groups, DSH examined differences on variables relevant to recidivism identified in this report and in the research literature.

The table below shows a comparison of the Direct Discharge and CONREP Treated samples on various characteristics.

Characteristic	Direct Discharge	CONREP Treated	Difference*
Total	2,011	602	
Gender			
Male	1,910 (94.9%)	459 (76.2%)	Significant
Female	101(5.1%)	143 (23.8%)	
Mean Age	M: 42.11	M: 45.48	Significant
Race-ethnicity			
White	745 (37%)	280 (46.5%)	Significant
Black	622 (30.9%)	147 (24.4%)	Significant
Hispanic	515 (25.6%)	125 (20.1%)	Significant
Asian Pacific Islander	72 (3.6%)	38 (6%)	Significant
Indigenous & Other	57 (2.8%)	12 (1.9%)	Not Significant
Mean Hospital LOS	M: 797.7 Range: 20 -8642	M: 1,895.67 Range: 63-9,962	Significant
Commitment Offense Category			
Violent (nonsexual)	1,515 (75.2%)	520 (86.3%)	Significant
Sex Offense (All violent)	245 (12.2%)	30 (4.9%)	Significant
Violent (nonsexual + sexual)	1,760 (87.8%)	550 (91%)	Significant
Mean Offense Severity	M: 8.3 Range: 4-11	M: 9.1 Range: 4-11	Significant
Legal Classification			
OMD-Parole	1,439 (71.6%)	70 (11.6%)	Significant
OMD-Civil	273 (13.5%)	113 (18.7%)	Significant
NGI	181 (9.0%)	403 (66.9%)	Significant
SVP (+ 1 MDSO)	118 (5.9%)	16 (2.6%)	Significant
Total Commitments			
1	1,647 (81.9%)	577 (95.8%)	1 and >1 Significant
2	344 (17.1 %)	22 (3.6%)	1 and >1 Significant
3-4	20 (.9%)	3* (.4%)	
Diagnostic Category			
Psychotic Disorder	1,285 (68.9%)	449 (74.5%)	Significant
Bipolar Disorder	237 (11.8%)	67 (11.1%)	Not Significant
Depressive Disorder	64 (3.2 %)	29 (4.8%)	Significant
Paraphilic Disorder	128 (6.4%)	17 (2.8%)	Significant
Any Substance Use Disorder	1,380 (69.8%)	426 (70.7%)	Not Significant
Any ASPD	145 (7.2%)	14 (2.3%)	Significant

**Statical significance of groups.*

M= Mean (Average)

DSH compared these factors for statistically significant differences with the following results:

Gender: In this sample, the probability of being male was about nineteen times higher than the probability of being female among those in the directly discharged group. The number of females in the CONREP Treated Group was nearly three times what would be expected.

Age at Discharge: The CONREP Treated group was significantly older than the Directly Discharged groups.

Race-Ethnicity: Those in the Directly Discharged group were significantly:

- Less likely to be White;
- More likely to be Black;
- More likely to be Hispanic; and
- Less likely to be Asian.

Hospital LOS: CONREP Treated patients had significantly longer lengths of stay in the hospital than did Directly Discharged patients.

Commitment Offense Category:

- Directly Discharged patients were significantly less likely to have a violent commitment offense.
- Directly Discharged patients were significantly more likely to have a sex offense.
- When generally violent and sexually violent commitment offenses were combined, Directly Discharged patients were still significantly less likely to have a violent offense, though to a lesser degree.

Commitment Offense Severity: The mean Commitment Offense Severity for the CONREP Treated group was significantly higher than that of the Directly Discharged groups.

Legal Classification: For the Legal Classifications, Directly Discharged patients were significantly:

- More likely to be OMD Parole. (In this sample the probability that a Directly Discharged patient was OMD Parole was over six times higher than the probability that a CONREP patient would have that classification).
- Less likely to be OMD Civil.
- Less likely to be NGI (In this sample the probability that a CONREP patient would be NGI was about 7 ½ times higher than the probability that a Directly Discharged patient would have that classification) and more likely to be SVP.

Number of Commitments. Directly Discharged patients were significantly more likely to have more than one separate state hospital commitment in the study period compared to CONREP Treated patients.

Diagnostic Category. With respect to Diagnostic Category, Directly Discharged patients were:

- Significantly less likely to have a psychotic disorder;
- Significantly more likely to have a paraphilic disorder;
- Significantly more likely to have a depressive disorder;
- About equally likely to have a substance use disorder; and
- Significantly more likely to have an antisocial personality disorder.

Factors Associated with Recidivism

Patients who were rearrested were significantly more likely to have the following characteristics, in order of strength.

1. Directly discharged;
2. Younger age;
3. More commitments;
4. Lower commitment offense severity; and
5. OMD classification.
6. Male gender.

These factors permitted correct classification of 41% of those who were rearrested, and correctly classified 83% of those who were not. Ethnicity, psychotic disorder diagnosis, and personality disorder diagnosis were not significantly related to rearrest. Hospital LOS approached a significant relationship to rearrest, however.

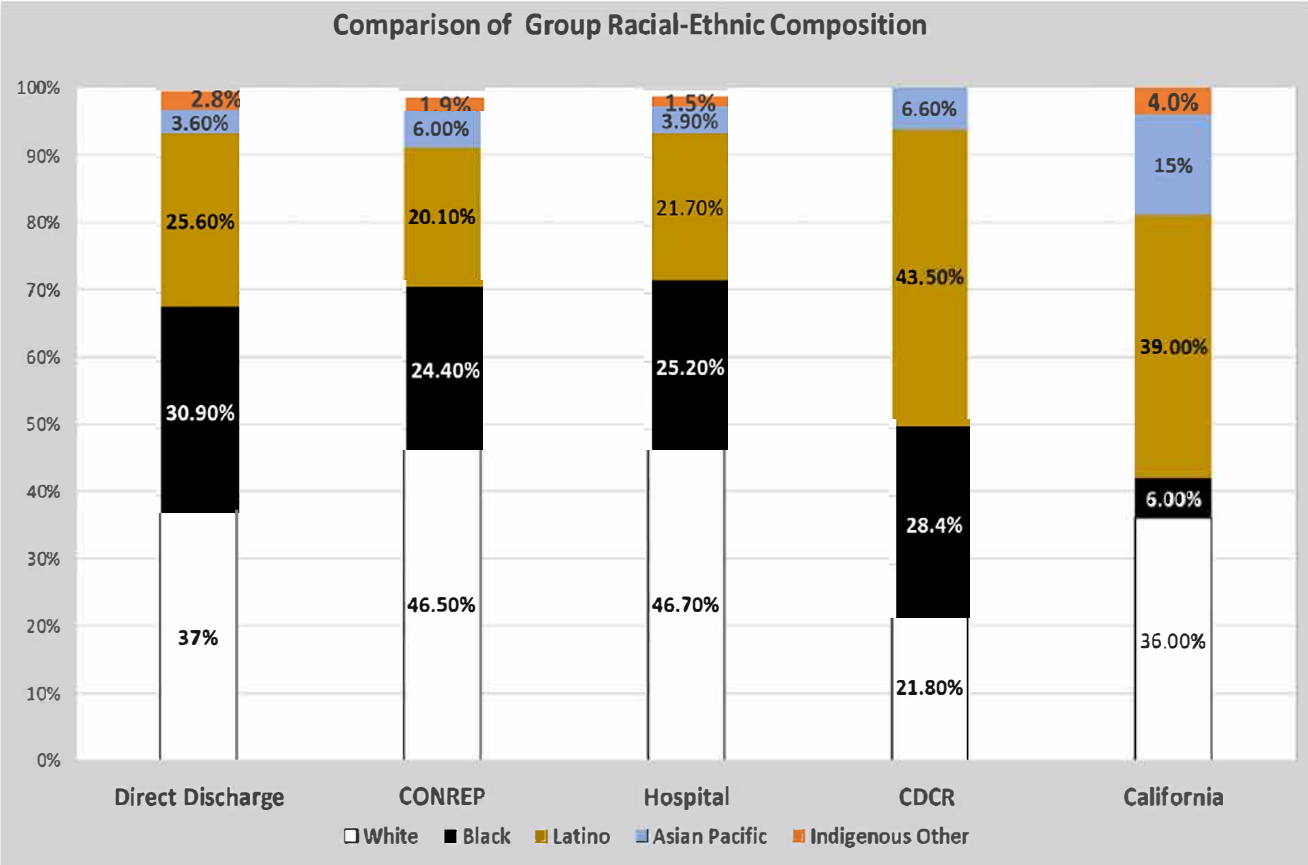
Demographic Comparisons with the Hospital Population (and Other Populations).

The figure below compares group racial-ethnic compositions of the five-year study groups (Direct Discharge and CONREP Treated) with the racial-ethnic compositions of the state hospitals, CDCR, and the California population for the year 2017. While these cohorts are not directly comparable, they give some context.

The racial-ethnic composition of the CONREP Treatment and hospital groups were nearly identical, with no significant differences found between these two groups. When compared to the state hospital population, the Direct Discharge group had a significantly larger proportion of Black and Hispanic patients and a significantly lower proportion of White patients. The difference between the proportions of the Asian Pacific and Indigenous groups was not significant.

Examining the CDCR and the California racial-ethnic compositions, we can see that Blacks are overrepresented in DSH and CDCR in comparison to their representation

in the California population. Over-representation of Blacks in the DSH patient population reflects their over-representation in the criminal justice system in general and in CDCR, which are the referral sources for DSH. Whites are overrepresented in the CONREP Treated and hospital groups and underrepresented in CDCR in comparison their representation in the California population. Hispanics are underrepresented in DSH in comparison to CDCR and the California population. The Asian Pacific Islander group is underrepresented in the DSH compared to their representation in the California Population. Statistical significance could not be calculated for the CDCR and California comparisons.



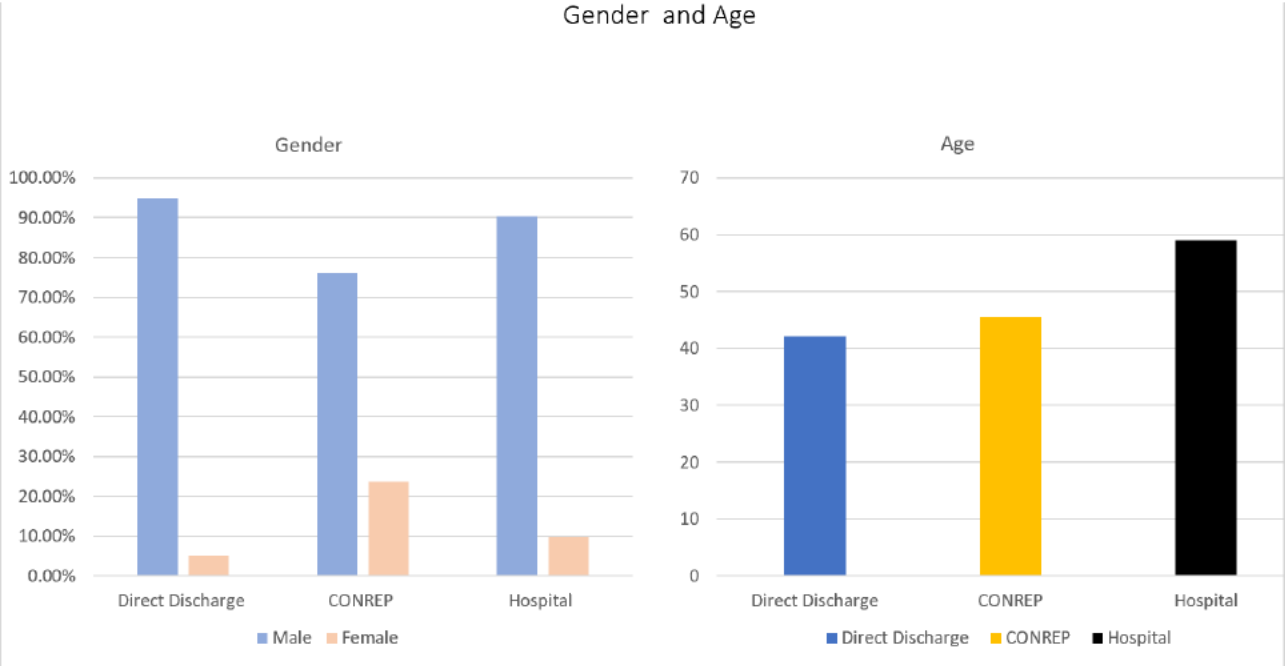
Note: CDCR research combines the Asian Pacific and Indigenous Other categories.
Sources: Public Policy Institute of California (PPIC) Fact Sheet for California demographics dated March 2021 for the year 2017; CDCR Office of Research Offender Data dated January 2021 for the year 2017; DSH Population data for the year 2017.

Gender and Age

The figure below compares gender compositions and mean (average) age of the released (studied) groups (Direct Discharge and CONREP Treated) with the those of the state hospitals for the year 2017.

Individuals in the Direct Discharge group were significantly more likely to be male than those in the CONREP Treated group. Those in the CONREP Treated group were significantly more likely to be female than those in the other groups.

Individuals in the Direct Discharge group were significantly younger than those in both other groups. The mean age difference between the released groups and the that of the hospital group was more than a decade.

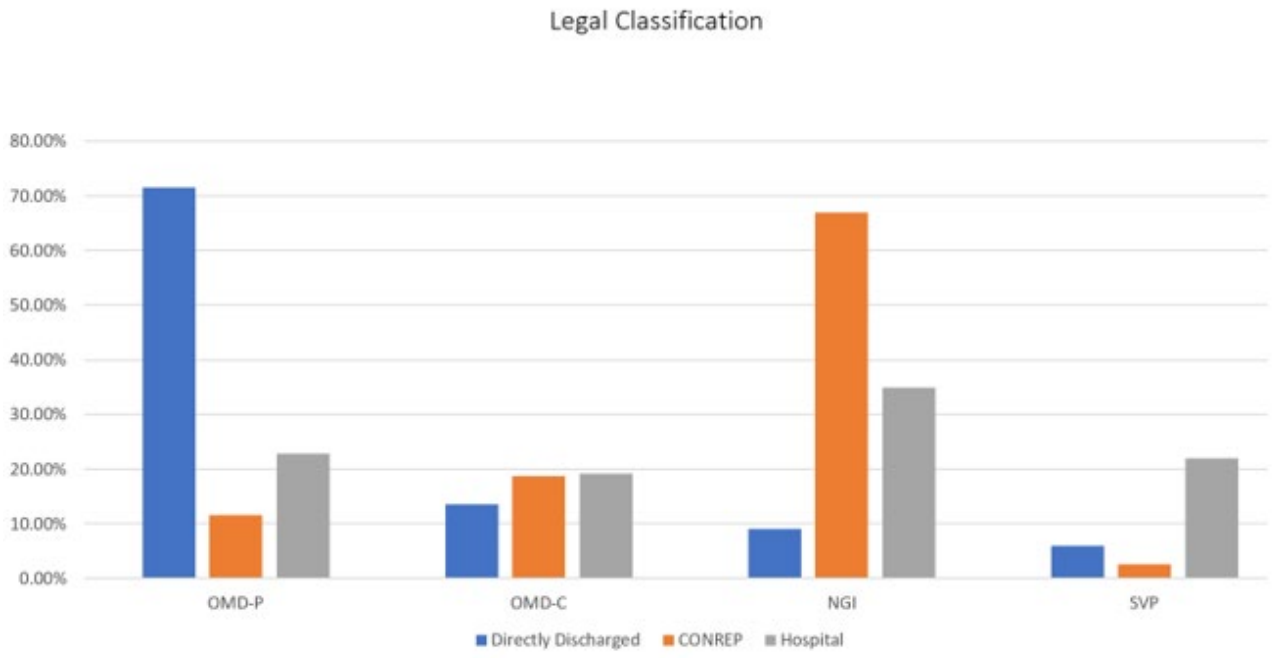


Legal Classification

The figure below compares the Legal Classification composition of the released (studied) groups (Direct Discharge and CONREP Treated) with that of the state hospitals for the year 2017.

There are significant differences between the Legal Classification release groups and that of the hospital groups, except for that of the OMD Civil Legal Classification. This difference is partially explained by different statute driven release requirements among the commitment schemes.

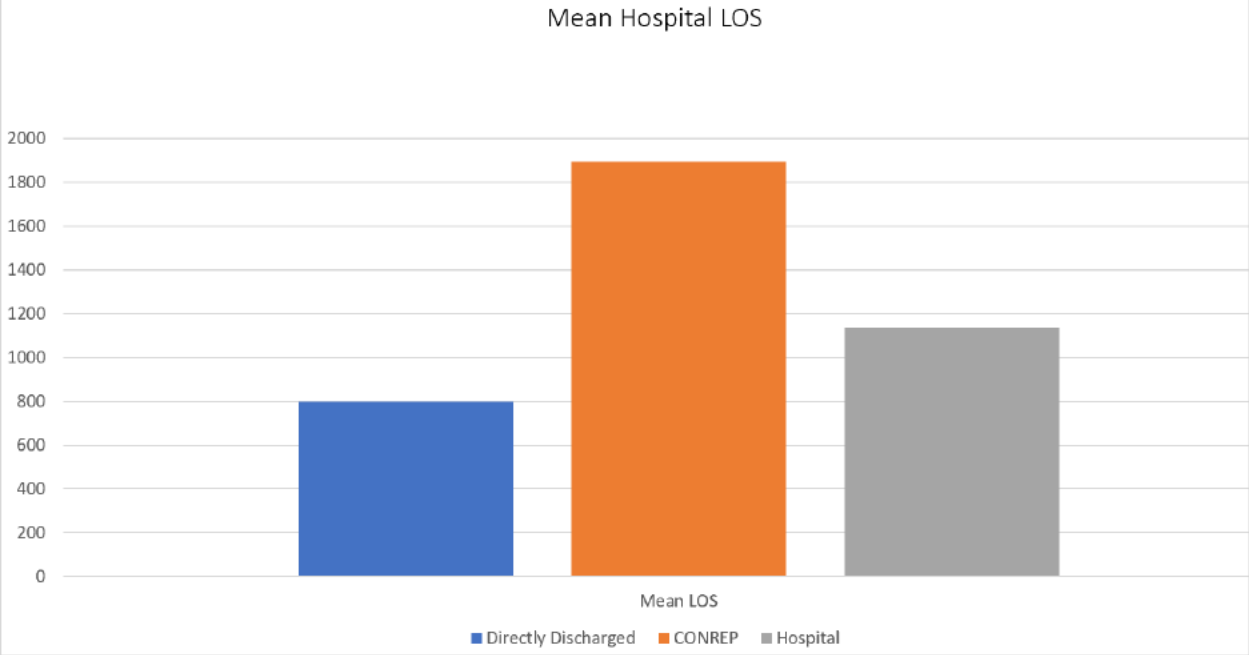
As noted previously, those in the OMD Legal Classification are much more likely to be Directly Discharged, and those in the NGI Legal Classification are much more likely to receive CONREP Treatment. This difference is at least partially explained by different statute driven release requirements for these two commitment schemes. The relatively high proportion of individuals in the NGI Legal Classification in the hospitals, likely reflects the high bar for release decisions the statue imposes.



Hospital LOS

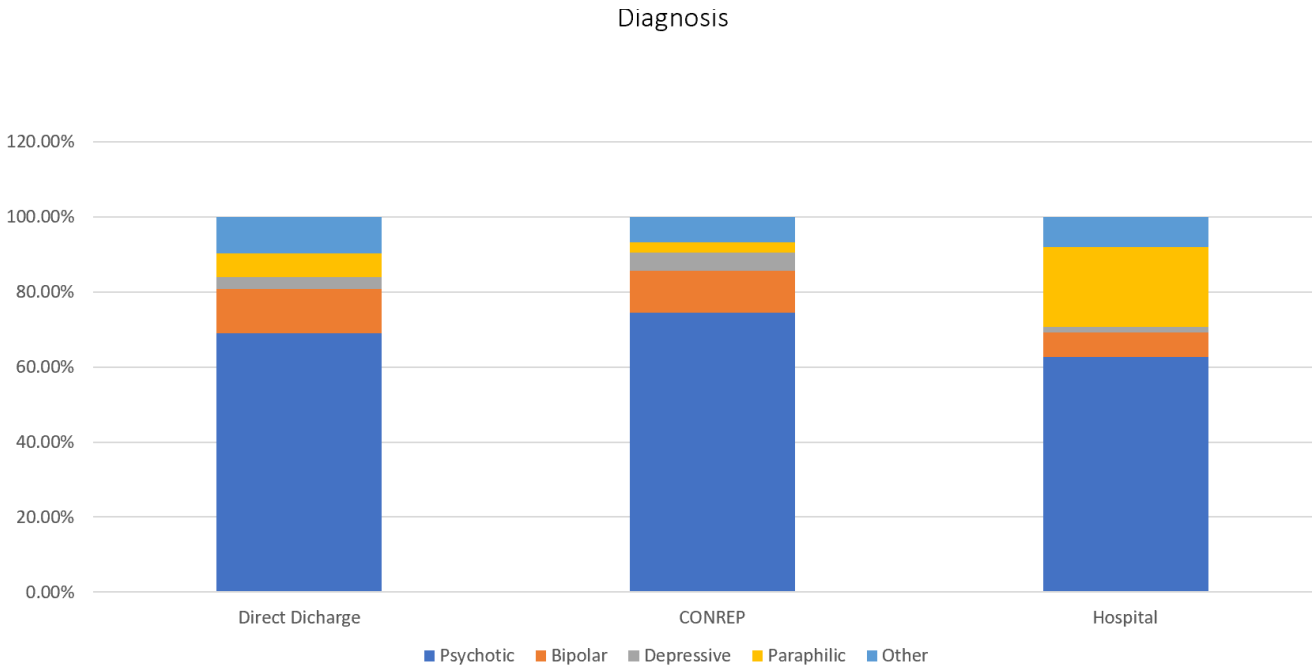
The figure below compares the hospital LOS of the released (studied) group (Direct Discharge and CONREP Treated) with the those of the state hospitals for the year 2017.

The Direct Discharge group had a significantly lower mean Lengths of Stay than did the CONREP Treated and hospital group (mean LOS 1,134). The CONREP-Treated Group had significantly longer Lengths of Stay than the hospital group. This difference can be attributed to the comparatively high number of individuals in CONREP from the NGI Legal Classification (with statute-driven long hospital stays).



Diagnosis

The figure below compares the Diagnostic Category composition of the studied groups (Direct Discharge and CONREP Treated) with the those of the state hospitals for the year 2017. Those in the Direct Discharge and CONREP Treated groups had higher proportions of individuals with psychotic disorders compared to that of the hospital group. The hospital group had higher proportions of individuals with a paraphilic disorder. This difference may be due to the comparatively high proportion of individuals in the SVP Legal Classification in the hospital group. Those meeting the criteria for the SVP Legal Classification, have a high proportion of individuals with paraphilic disorders.



Factors Associated with CONREP Placement

Patients who were placed in CONREP were significantly more likely to have the following characteristics, in order of strength.

1. Not OMD Legal Classification (this relationship was robust);
2. Female gender;
3. Psychotic Disorder;
4. Fewer previous commitments; and
5. Higher commitment offense severity.

These factors permitted correct classification of 85 % of those who were placed in CONREP versus those that were Directly Discharged. Age at discharge and Hospital LOS were not significantly related.

Direct Discharge and CONREP Treated Recidivism Comparisons

Recidivism rates for CONREP Treated patients were consistently, significantly lower than recidivism rates for Direct Discharge patients. Lower rates for CONREP Treated patients were found after one, three, and five years of community exposure and over the course of the study. These lower rates held for each recidivism category: any arrest, violent crime, and sex offense arrests. The probability of any rearrest was between four to seven times more likely for the Direct Discharge patients than for the CONREP Treated patients in this sample. Additionally, the probability of recidivism for a violent crime was between four to seven times more likely for the Direct Discharge group; similarly, the probability of recidivism for a sex offense was four and a half to six times more likely among those in the Direct Discharge group. The difference in the violent to nonviolent arrest ratio for these groups was not significant. The group of CONREP Treated patients who were rearrested remained in the community significantly longer, even after CONREP release, than did Direct Discharge patients who were rearrested. As such, the effects of CONREP treatment and the supported re-integration into the community it provides may linger even after active CONREP treatment.

Rearrest rates for CONREP patients after one year of follow-up have declined since the 1990's and since the last CONREP Report released in 2002. Whether this reduction is attributable to reasons related to declining crime rates in the United States in the intervening years (Federal Bureau of Investigation Uniform Crime Reporting, 2021) or improvements in hospital and CONREP treatment is unknown. The difference between rearrest rates of Direct Discharge and CONREP Treated patients observed in the 1990 report is similar to the difference observed in the current study, after a nearly 20-year gap. This difference parallels that found by McDermott et. al (2021) in their multiyear follow-up of NGI patients released between 2002 and 2013. These differences suggest that CONREP Treatment impacts recidivism under varied social conditions and across cohorts. Without access to the data for those findings, however, we cannot definitively conclude CONREP treatment effects account for these differences and their apparent stability.

Rearrest rates for both CONREP Treated and Direct Discharge patients are lower than those reported by CDCR (2017) for prisoners discharged to the community from an in-custody psychiatric treatment program, the Enhanced Outpatient Program. (For comparison purposes, the EOP population was the CDCR population that most closely resembled the population of the state hospitals at the time of the 2017

report,[6] in that EOP participants are likely to have a diagnosis of a serious mental health disorder and require intensive treatment). Reconviction rates for the CDCR EOP group were 22.90% at one year follow-up and 51.80% at three years follow-up. In comparison, the rearrest rates in this study were 21.32% for Direct Discharge and 3.02% for CONREP Treated patients at one year follow-up and 41.59% for Direct Discharge and 9.43% for CONREP Treated patients at three years follow-up. The true differences between the CDCR and DSH groups may be even larger, considering that arrests are more prevalent than convictions. Post-release intensive psychiatric treatment may be what reduced recidivism. However, group differences in risk factors may also account for these differences.

DSH established criteria for release to CONREP to ensure that patients are prepared to transition to the community within the existent CONREP continuum of care. When individuals are not deemed stabilized to a point where they can be safely treated in the CONREP continuum, they may petition the court for release to be directly discharged from DSH or may reach their maximum commitment time. The divergent clinical release standards between Direct Discharge and CONREP placement may contribute to the disparities in recidivism rates. Paradoxically the requirement that a CONREP patient be deemed to be able to be safely and effectively treated in the community may render some patients ineligible. Patients who do not meet the threshold for CONREP placement may be subsequently released via court decertification (as with OMD), reach their maximum term (as with NGI), be deemed to not meet criteria by the court (as with SVP), or other means. (Refer to Table 13 for the Release to CONREP criteria for the OMD and NGI Legal Classifications). Accordingly, many (more dangerous) patients may be released directly before they can meet the CONREP criteria. These criteria also ensure the most compliant, most stable, and least dangerous hospital patients are included in the CONREP program. As such recidivism rates could reflect this selection process.

[6] CDCR now has a Psychiatric Inpatient Program (PIP) that may more strongly resemble state hospital population. Recidivism rates for that group are not yet available.

The table below summarizes the Release to CONREP Criteria for the OMD and NGI Legal Classifications:

RELEASE TO CONREP CRITERIA	
OMD	**NGI**
A. Aggressive/Threats *3 - 6 Mos* 1. No Physical Aggression (Except Self-Defense) 2. No Substantial Threat – Physical Harm, Others 3. No Property Damage to Threaten/Intimidate	**A. Aggressive/Threats** *9 - 12 Mos* 1. No Physical Aggression (Except Self-Defense) 2. No Verbal Threats
B. Voluntarily Following his Treatment Plan *6 Mos Min* 1. No Major Rule Violations 2. Psychiatric Medication Adherence 3. Participates in Treatment as "Reasonable Person" **4. Realistic Plan to Avoid Dangerous Behavior** a. Violence b. Sexual Abuse (Paraphilia Diagnosis), if Relevant c. Substance Abuse, if Relevant **5. No Use of EtOH or Non-Prescribed Substances** a. No UA Drug Tests or Refusals b. No Positive UA Drug Screens	**B. Voluntarily Following his Treatment Plan** *6 Mos Min* 1. No Major Rule Violations 2. Psychiatric Medication Adherence 3. Substantial Attendance in Groups – Clinical Risk Factors **4. Demonstrated Capacity for Relapse Prevention Plan** **5. No Use of EtOH or Non-Prescribed Substances** a. No UA Drug Tests or Refusals b. No Positive UA Drug Screens
C. Symptom Control *No Time* 1. Can be Safely and Effectively Treated 2. Able or Willing to Discuss Symptoms when Present 3. Accepts Intervention for Symptoms	**C. Symptom Control** *No Time* 1. Symptoms Adequately Controlled in Hospital 2. Readiness for Supervised Outpatient Treatment
D. Agrees to Terms and Conditions of CONREP	**D. Insight Regarding Offense** 1. Offense and Role of Mental Illness/Substance Abuse 2. Risk of Dangerousness-Offense/Past Dangerous Behavior **E. Agrees to Terms and Conditions of CONREP**

Recidivism by Legal Classification and Treatment Status.

DSH observed significant differences in the recidivism rates by Legal Classification with both Direct Discharge and CONREP Treated patients for each follow-up period. For both treatment groups, the recidivism rates followed the same order. OMD Parole patients recidivated at the highest rates, followed by OMD Civil patients, then NGI patients, and finally the SVP patients. SVP had the lowest recidivism rates, with the exception of the 3-year follow-up when NGI's had the lowest rate. This order is similar to the 1993 report, though these rates are now more discrepant. The recidivism rates for Direct Discharge patients was significantly higher than CONREP Treated patients for each Legal Classification, and the differences in rates among Legal Classifications significant for the total sample. However, the observed association between Legal Classification and recidivism was significant only among Direct Discharge patients. This means that CONREP may buffer the impact of Legal Classification on recidivism. Accordingly, the impact of CONREP may be especially impactful for the OMD classification.

Significant differences between the Legal Classifications on key variables related to criminal recidivism likely account for different outcomes for patients in these classifications. The group with the highest recidivism rate, OMD Parole, was

significantly younger, more likely to be male, have a much shorter mean Hospital LOS (by a factor of more than four compared to the next shortest mean Hospital-LOS), [7] and to have more than one state hospital commitment.[8] This group had a lower level of Commitment Offense Severity than patients in the NGI or SVP category. The OMD Civil Legal Classification had the next highest recidivism rate, with a lower level of Commitment Offense Severity and shorter lengths of stay than the NGI or SVP groups. This group was older than the OMD Parole Group. However, neither OMD classification was more likely than the other categories to have a personality or substance use disorder, two primary factors related to recidivism (See Bonta, 2014; Monahan, 2013). To be certified in the OMD Legal Classification, a patient must have served a prison sentence and been treated for a severe mental health disorder during that sentence. Therefore, higher rates of recidivism in OMD groups may be related to the impact of a prison term on a patient with a severe mental health disorder, lifestyle, and social factors. Further, OMDs are more likely to appeal their commitments and be decertified by the court (which can result in abrupt release to the community) rather than go through CONREP than those in the other commitment categories. This may contribute to the especially higher rates for the OMD classification in Direct Discharge patients.

Patients in the NGI Legal Classification were significantly more likely to be female compared to the other categories. The NGI Legal Classification also had longer lengths of stay compared to the OMD classifications. They had higher levels of offense severity as well. Offense severity has not been linked to recidivism (Laskorunsky, 2018), and NGI related crimes tend to be more severe, committed in a psychotic state and against people known to them. NGI are not ordinarily related to criminal lifestyle, which is associated with re-offense. The longer hospital lengths of stay and gender of this group partially explain why this group is less likely to reoffend. Stricter selection criteria for those in the NGI compared to the OMD classifications (Refer to Table 13 for a comparison) may explain some of the difference in recidivism rates between Legal Classifications in CONREP.[9] The criteria may preclude NGI patients, who would have met the less stringent OMD criteria, from participation and explain the lower recidivism rate for this group.

[7] The 1998 and 2002 Effectiveness Reports also showed a significantly shorter Hospital LOS for OMDs than the other Legal Classifications.

[8] Note that Hospital Lengths of Stay for each Legal Classification are directly related to the nature of the classification scheme. To illustrate, OMD is a one-year commitment, designed to ensure stable amelioration of dangerousness related to highly treatable mental disorders; SVP is an indefinite commitment, designed to manage dangerousness related to more enduring and difficult to treat disorders; and NGI is a commitment designed restore a person to sanity, with a duration of commitment that can extend to the maximum term of the commitment offense and beyond.

[9] Though these differences were not statistically significant, a difference was clear.

Patients in the SVP Legal Classification had significantly lower recidivism rates than the other Legal Classifications.[10] These rates were commensurate with rates for the California SVP Legal Classification in a study by Azizian, et.al. (2021). Remarkably, the SVP group in this study had significantly higher rates of established risk factors for re-offense, including Antisocial Personality Disorder and other Personality Disorder Diagnosis; Paraphilic Disorder Diagnosis,[11] and male gender (Skeem & Peterson, 2011; Bonta 2014). Nevertheless, they were also much older than those in the other Legal Classifications, making them less prone to recidivism in general and sex offense recidivism in particular. They also had significantly longer Hospital Lengths of Stay than the OMD Legal Classifications. To further explain this low rate, the SVP commitment is indefinite and the statutory requirements for release are high. The specter of being rearrested and again committed to the state hospital or returning to the hospital in the case of CONREP, and again having to meet the threshold for release may serve as a strong disincentive for re-offense. Further securing CONREP placement for those in the SVP Legal Classification is difficult further contributing to longer Hospital Length of Stay. Once in CONREP, those in the SVP Legal Classification have more intense monitoring and stricter limits than the other classifications. They are also housed in isolated areas and their release is met with public protest. Accordingly, their opportunities for reoffending are limited. Even Direct Discharge patients face strict registration. On the other hand, sex offenses tend to be under reported (Morgan & Kena, 2018); longer follow-up periods may be required to identify recidivism for this group. The lower rates could be an artifact of these factors.

CONREP Treatment

CONREP Treatment affects recidivism, with comparatively lower recidivism during and post treatment and with longer treatment duration associated with lower recidivism. CONREP treatment exerts these effects by various means, including Active CONREP treatment through clinical, supervision, and housing stability programs; supportive community reintegration of long-term state hospital patients; and the ability to re-hospitalize patients who become unstable and violate their CONREP conditions. Active CONREP treatment itself impacts recidivism. Indeed, fewer patients recidivate while in CONREP (a rate of four percent) than post treatment (a rate of seven percent). Further, arrests accelerate within the first 500 days of discharge before leveling off, arguing for the impact of active treatment. Additionally, longer lengths of CONREP stay were associated with lower recidivism.

[10] The 1990 and 1993 reports showed that the Mentally Disordered Sex Offender (MDSO) Legal Classification group had lower rates of recidivism. This Legal Classification, which aimed to treat people who committed sex offenses at the state hospital in lieu of a prison sentence, was repealed in 1981, and few of these patients remain in DSH programs. The SVP Legal Classification, enacted in 1995, alternatively treat people who have sex offended after the prison term for the offense. Both sex-offense related classifications have had lower recidivism than other Legal Classifications.

[11] Paraphilic Disorder is a risk factor for sex offense recidivism (Hanson & Morton-Bourgon, 2005)

This suggests a dose-response effect, showing a relationship between the duration (dose) of treatment) and better outcomes.

However, the effects of CONREP treatment appear to persist even after discharge, wherein rates of recidivism remain low (at a rate of seven percent). As such, active treatment, supervision, and control do not fully explain these lowered rates. However, CONREP treatment is also a means of community re-integration and establishing continuity of psychiatric care. This mechanism may allow many CONREP Treated patients to establish the psychiatric, social, and economic stability in the community needed to avoid further justice system involvement.

A small group (5%) of patients were returned to the hospital. This hospital return rate is much lower than the 21.0% revocation rate reported in 1990, the 20.4% rate reported in 1998, and the 17.0% rate (for NGI patients) in 2002. This group had a disproportionate number of the arrests that did occur during CONREP and in the CONREP Treatment group. This pattern shows a small proportion of the group presents the most potential danger, and hospitalization is an expedient way to manage decompensation and noncompliance in this group. Rehospitalization (with its potential for revocation) is an effective tool for managing the inherent uncertainty of release decisions. Although CONREP itself does show positive effects, the CONREP Treatment group did have fewer risk factors. This may partially account for enduringly low rates after discharge. The screening process for CONREP appears to be sufficiently robust to preclude those most likely to recidivate from participation.

Direct Discharge and CONREP Treatment Group Differences

Overall, the Direct Discharge group was more likely to have well established risk factors for recidivism and violence, at least for those available for analysis. Established risk factors included male gender, younger age, paraphilic disorder diagnosis, and antisocial personality disorder diagnosis. The Direct Discharge group also included proportionally more patients in the OMD Legal Classification; more patients with more than one commitment; and had shorter mean Hospitals Length of Stay compared to the CONREP Treated Group. This study found significantly higher recidivism rates for patients with these factors. Nevertheless, the Direct Discharge group also included a larger portion of SVP Legal Classification status, which had comparatively lower rates of recidivism in this study. Members of this group were more likely to be in the Black, Hispanic, and Indigenous or Other Race-Ethnicity categories. These Race-Ethnicity categories have higher rates of rearrest (Morgan & Kena, 2018) and were found in a previous California report study to be related to recidivism (Wiederanders, 1990).[12]This group also had lower rates of

[12] People in racial and ethnic minorities are more likely to be arrested, likely as a consequence of social factors including bias. (See Vincent & Viljoen, 2020). We make no implication that people in racial and ethnic minorities have inherent criminal tendencies.

psychotic disorder diagnosis. The combination lower rates of psychotic disorder and higher rates of ASPD, may render a portion of this group less amenable to psychiatric treatment for risk reduction.

In contrast, the CONREP Treated group had fewer established risk factors for recidivism. This group had proportionally more patients with an NGI Legal Classification, which was associated with lower recidivism in this study. CONREP Treated patients were also more likely to have primary diagnosis of psychotic disorder, a diagnostic category shown to have an inverse correlation to recidivism and violence (Harris et. al, 2015). This group also had had a higher mean commitment offense severity, a factor not established as associated with recidivism (Laskorunsky, 2018). However, members of this group were more likely to have committed a violent offense, which is a well-established risk factor for future violence. However, violent crimes by persons found NGI are less likely to be driven by antisocial and trait-related violent proclivities, and the high proportion of NGI may partially explain the lower recidivism even with the higher crime severity. The CONREP Treated group was significantly older and had longer lengths of stay in the hospital. Both groups had the same proportion of patients diagnosed with a substance use disorder and have similar rates of substance use disorder and bipolar diagnoses. Due to high rates of substance use disorder across groups, this key risk factor is unlikely to have played a role in the different recidivism rates.

The demographic characteristics of the CONREP Treatment Group in the current study differ from those from earlier studies. In 1990 and 1993, 80.0% were committed for a violent crime compared to 86.3% for the current CONREP Group. 66.0% (1990) and 60.0% (1993) were White, compared to 46.5% in the current group; 85.0% were males, compared to the current rate of 76.5%. Patients in previous groups were younger, with a mean age the 30s, compared to the mean age of 45.8 in the current CONREP group. However, the most common diagnosis in the earlier group was schizophrenia, a psychotic disorder. This is aligned with the high rates (74.5%) of psychotic disorder in the current study.

Summary

In this study, CONREP treatment status yielded the lowest rates of recidivism for each time observation period, recidivism offense category and Legal Classification. NGI and SVP Legal Classifications were also associated with lower recidivism rates. Female gender, older age, and longer hospital and CONREP-LOS also appear to have important effects on recidivism and to moderate the effects of CONREP alone.

CONREP is a safe, effective, and cost-effective way to transition patients from the hospital to the community. CONREP screens and evaluates individuals for readiness to safely move to outpatient treatment in the community. Also, its rehospitalization mechanism provides a way to detect and manage a small subgroup of more challenging patients. This report shows that CONREP Treated patients had lower

recidivism rates and committed fewer violent and sexual offenses. Moreover, CONREP Treated patients who did recidivate remained arrest free in the community for longer periods. The results are consistent with the earlier California CONREP Effectiveness Reports, all showing low arrest and rehospitalization and revocation rates. These results are consistent with studies of CONREP programs in other states and countries in past decades, demonstrating the utility of the concept.

Nevertheless, CONREP-Treatment alone does not account for all of the reduced risk observed. The lower rates of recidivism compared to Direct Discharge patients may be partially attributable to the disproportionate number of lower-risk NGI Legal Classification and female patients in the CONREP-Treatment Group, as well as to the older mean age and higher mean hospital LOS in that group. Further, CONREP patients were more likely to be of White or Asian Pacific Islander race or ethnicity, groups less subject to arrest. Accordingly, limited availability and the robust screening procedure for CONREP may leave some of the most challenging patients without benefit of CONREP community re-integration support. Most patients must rely on court decertification and reaching maximum term to be released. Release criteria were established with public safety in mind. An unintended consequence of strict release to CONREP criteria may be that Direct Discharge is the only alternative or the easier path for release for the more dangerous patients. As such, the most dangerous patients could be released directly to the community without the guardrails of mandatory treatment and not have the benefit of CONREP. CONREP is presently expanding eligibility and its continuum of care. This expansion may increase public safety by providing monitoring and reintegration support for more patients—patients who could otherwise be directly discharged without these supports. Expanded access is also a way to safely afford more opportunities for people with serious mental health conditions to receive treatment in the least restrictive environment.

Limitations

This study has several limitations. Most importantly, the CONREP Treated group differed in important ways from the Direct Discharge group, so CONREP-specific effects were not established. As well, DSH did not examine each CONREP program. CONREP programs vary widely in structure; restrictions; treatment; location; and operations. DSH did not identify effects of these conditions. Further, arrests are a comparatively blunt indicator of outcome. Offenses and violent incidents may not have been detected or have led to arrest. As well, arrests do not confirm that the patient committed an offense. DSH did not have access to crime descriptions, only the listed charges themselves, affecting the precision of the severity and category of offense indicators. Further, arrest data from the California DOJ does not reliably include out of state, federal offenses, or deaths. The results may have omitted these offenses or included deceased people in the analysis. Additionally, the quality of crime reporting to DOJ varies by jurisdiction. The results may omit some crimes or deaths that had occurred. Nevertheless, DOJ is the most valid arrest data available

for DSH patients who have been released. As well, we did not have nuanced indicators of the patient's clinical status. The retrospective nature of this study precluded identifying a valid and scalable indicator of clinical status upon discharge and follow-up and from garnering consent for a more nuanced outcome measure for the CONREP Treated group. There is no clear pathway to follow up on the clinical status of Direct Discharge patients. Further, the presence and nature of treatments, supervision, and supports for the Direct Discharge group is unknown and was not quantified. Nevertheless, the indicators used revealed important differences in outcome and groups. It is possible that crimes and violent incidents could go undetected and not be reported to DOJ. Our outcome data was limited to crimes reported to the California DOJ. Further, death after discharge could be unreliably reported on DOJ records, and DSH did not have access to death records other than for CONREP patients.

Potential Areas for Further Investigation:

DSH is implementing a significant expansion of CONREP capacity, including an expanded continuum of care. Future analysis will look at the impact of this continuum expansion. DSH also plans to introduce simple yet valid clinical and re-integration status indicators that CONREP programs can include upon intake and administer at regular intervals. This will provide a more comprehensive and sensitive outcome indicator. Whether the level of supervision and specific interventions affect outcome is also an important question. Further analysis of the OMD Legal Classification and ways to manage the needs of this group is warranted. This group may have other criminogenic needs that can be addressed. DSH further suggests investigation of the arrest incidents to examine proximal causes of recidivism. Further, additional analysis of the current data set is feasible.

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