

Addressing the Opioid Crisis

in Orange County, CA





Table of Contents

Addressing the Opioid Crisis in Orange County, CA

Background	1
Addressing the Problem	2
Prevention	2
Harm Reduction	4
Treatment & Recovery Services	5

Appendix

A Community Input Analysis	8-56
Opening Message - Orange County Alcohol and Drug Advisory Board	9
Overview	11
Prevention	23
Harm Reduction	24
Treatment	26
Recovery Support	28
Strategies, Objectives & Recommendations	29
Conclusion	52
References	53



The U.S. is experiencing an opioid crisis and Orange County, CA is no exception.¹

- ◆ Nearly 1.5 million opioid prescriptions were dispensed to Orange County residents in 2018, down from an average of 1.7 million in the three previous years
- ◆ The opioid overdose death rate for Orange County is higher than the statewide rate
- ◆ Seven out of every ten drug related deaths in the county involve opioids
 - Prescription opioids account for nearly half of opioid overdose deaths
 - More than eight out of ten opioid overdose deaths are accidental
- ◆ Opioid overdose deaths are more common among individuals living in coastal and south Orange County cities, men, adults ages 45 to 54 years old, and non-Hispanic Whites
- ◆ Opioid related emergency department (ED) visits more than tripled between 2005 and 2016
- ◆ Since 2016, opioid-related ED visits, hospitalizations, and overdose deaths have been declining
- ◆ The decline in opioid overdose deaths parallels the drop in prescriptions, however there has been an increase in heroin and fentanyl related deaths

¹ *Opioid Overdose and Death in Orange County*. Orange County Health Care Agency and Orange County Sheriff-Coroner Department. Santa Ana, California, August, 2017.

What is the County of Orange Doing to Address the Problem?

The Orange County Alcohol and Drug Advisory Board (ADAB), in collaboration with Orange County stakeholders and the Orange County Health Care Agency (HCA), developed the report which begins on page 6 entitled *The Opioid Crisis in Orange County, CA: A Community Input Analysis*. The report outlines the scope of the opioid problem, summarizes priorities identified through an intensive community input process, and provides a series of recommendations for addressing the opioid crisis locally. The County of Orange (County) is actively engaging in efforts to address this opioid crisis.

HCA currently provides a variety of prevention, harm reduction, treatment and recovery services to help prevent and reduce use and misuse of opioid substances. The County also participates in regional coalitions and initiatives, with community partners to address issues of opioid use and misuse, such as the Be Well Substance Use Initiative focused on co-creating a public-private system of care for treating opioid use disorder. Additionally, the County participates in the annual UCI Opioid Hackathon, which focuses on finding local, creative solutions using data and technology to address the opioid epidemic.

Prevention

The County provides a variety of prevention services that include public awareness campaigns to increase awareness of opioid misuse and to educate on safe use and handling of opioid medications, targeted prescriber outreach and community education at public forums and events. Below is a sampling of County prevention efforts.

PUBLIC AWARENESS CAMPAIGNS

Coordinated by the County and sponsored by the Orange County Prescription Abuse Prevention

Coalition, the **Monitor, Secure, and Destroy campaign** aims to reduce misuse of prescription medication, by educating the public on how to monitor and secure medications, and how to destroy unused or expired medications. There are dozens of designated locations² throughout the county with medication drop boxes, offering safe locations for the community to dispose of unused medications. Twice per year, the County helps promote the federal Drug Enforcement Administration's **National Drug Take Back Day**. Last year, Orange County took back nearly 8,000 pounds of unused medications.

² <http://www.ochealthinfo.com/civicax/filebank/blobdload.aspx?BlobID=55575>

PREVENTION AWARENESS CAMPAIGN: COMING SOON!

In early 2020, the County will launch two opioid overdose and misuse prevention campaigns. Both campaigns will include countywide education as well as targeted messaging for high risk groups and regions of the county, through a multi-media approach using social, digital, and print media.

The opioid overdose prevention campaign for adults is designed to increase awareness that opioid misuse and addiction can affect anyone, and educate on alternative options to pain management. Specialized messaging will be targeted to groups at higher risk of opioid overdose, including adults living in coastal and southern Orange County cities, non-Hispanic White adults, and men ages 45-54.

The youth prescription drug abuse prevention campaign will target youth and parents/caregivers, with a focus on preventing prescription drug misuse. Prescription drugs are easily accessible to teens, who often believe the myth that prescription drugs provide a “safe” high. Targeted messaging will be directed toward youth and parents/caregivers in cities surrounding Laguna Beach, Los Alamitos, Capistrano, and Newport Mesa Unified School Districts, as these districts have higher rates of self-reported misuse of prescription opioids among high school youth.

TARGETED PREVENTION FOR PRESCRIBERS: PRESCRIBING GUIDELINES AND MONITORING PRACTICES

The County collaborates with community health experts, medical professionals, hospitals, and law enforcement, as part of **SaferRX OC**, a collaborative on prescription drug abuse coordinated through UCI Health, to raise awareness and prescriber education. All physicians in the state of California are required to use the **Controlled Substance Utilization Review and Evaluation System (CURES)** to check patient prescription history before writing a new opioid prescription.

TARGETED PREVENTION AND EDUCATION PROGRAMS FOR YOUTH

The County coordinates **Red Ribbon Week**, held in October each year at schools and in communities countywide. The program is designed to increase awareness about alcohol and other drug prevention. The County funds programs within schools, the community and faith-based settings to provide youth with targeted substance use prevention and education services. One of these youth-focused programs is the Orange County Department of Education **Friday Night Live Partnership**, which coordinates activities to engage students of all ages in substance use prevention activities on school campuses and in the community. Youth design and implement activities that benefit their peers, schools and communities.

Harm Reduction



In recent years, the County increased access to **Narcan**, a nasal spray version of the medication naloxone, which is a prescription medication that reverses the effects of an overdose from opioid substances. During an overdose, multiple doses of Narcan may be needed. All County-contracted Narcotic Treatment/Opioid Treatment Program sites have Narcan available to clients with opioid use disorders, and all County behavioral health clinics have Narcan onsite, in case someone overdoses at a clinic. Many law enforcement officers, first responders, Probation officers, and others in the community also carry Narcan. In CY 2018, the Orange County Sheriff's Department administered 58 doses of Narcan, a 59% increase from CY 2017.

DISTRIBUTING A LIFE-SAVING MEDICATION AND HARM REDUCTION SUPPLIES TO THE PUBLIC

The real first responders during an overdose are often friends and family who witness the overdose. In 2017, the County received a Naloxone Distribution Grant from the California Department of Public Health (CDPH), greatly increasing access to Narcan, by providing the County with over 6,200 doses of the medication. The County contracted with Solace Foundation of Orange County³, to distribute Narcan to community members and to train them in overdose recognition and response. Its volunteers conduct street outreach and training on the administration

of Narcan to active users of opioids and to friends or family of individuals who use opioid substances. They also provide Narcan and training to staff at schools, drug treatment facilities, sober living homes, and detox facilities, and to clients at drug treatment programs. Along with Narcan, Solace Foundation distributes **fentanyl test strips**, allowing individuals to test their drugs for fentanyl, a powerful opioid responsible for many recent overdoses.

BEHAVIORAL HEALTH SERVICES CRISIS AND NON-CRISIS SERVICES

- ◆ **Administrative Services Organization (ASO)** at (800) 723-8641. A primary portal of entry for Orange County residents seeking behavioral health services available twenty-four (24) hour, seven (7) days a week.
- ◆ **OC Links** at (855)-625-4657. Information and referrals to OC Behavioral Health Services. M-F, 8 a.m. to 6 p.m
- ◆ **OC Warmline** at (877) 910-9276. Provides telephone-based, non-crisis support for anyone struggling with mental health and/or substance use issues. Online chat available at <https://www.namioc.org/oc-warmline>. M-F, 9 a.m. to 3 a.m.; S-S, 10 a.m. to 3 a.m.
- ◆ **Veterans Crisis Line** 800-273-8255, press 1, 24/7/365.

³ Solace Foundation is the first naloxone distribution program in Orange County, operating since 2015. For more information on Solace Foundation, visit <https://www.solacefoundationofoc.org/>

Treatment & Recovery Services

Drug Medi-Cal Organized Delivery System (DMC-ODS): Substance Use Treatment in the Community

The County implemented DMC-ODS in July 2018, as part of a state Department of Health Care Services pilot program, funded by Medi-Cal and designed to restructure substance use disorder (SUD) services into an organized system of service delivery. DMC-ODS is a comprehensive substance use treatment and recovery support system for adults and youth 12-17 years old, with the goal of providing timely access to services, thorough assessments to determine the most appropriate level of care, and use of evidence-based, client-centered services provided by qualified, DMC-ODS certified staff. Implementation of DMC-ODS has resulted in establishing County-funded intensive outpatient treatment programs, increased access to County-funded Medication-Assisted Treatment (MAT)⁴, and expanded capacity to serve more individuals across the continuum of services.

24/7 BENEFICIARY ACCESS LINE:

If you or a loved one has a substance use problem, and qualify for Medi-Cal, call **(800) 723-8641** to get screened and linked to treatment

DMC-ODS SERVICES⁵

- ◆ Outpatient Drug-Free Treatment
- ◆ Intensive Outpatient Treatment
- ◆ Residential Treatment
- ◆ Withdrawal Management (Detox)
- ◆ Medication-Assisted Treatment (MAT)
- ◆ Recovery Services

County of Orange currently funds 14 Outpatient Drug Free and Intensive Outpatient Treatment sites, 8 Residential Treatment facilities (including 4 non DMC-ODS facilities), 3 Withdrawal Management facilities, 4 MAT facilities, and 6 recovery residences⁶. Recovery Services are available to individuals receiving any level of treatment, or after completing treatment.

BE WELL REGIONAL HEALTH CAMPUS: COMING SOON!

The County is partnering with Kaiser Permanente, Hoag, Providence St. Joseph Health, and CalOptima to develop a public-private Be Well Orange County Regional Behavioral Health Campus. The Be Well facility, expected to open in early 2021, will provide a spectrum of mental health and Substance Use Disorder (SUD) treatment services, a mental health (Crisis Stabilization Unit/CSU) and SUD (sobering station) Intake and Referral program, Withdrawal Management program, and two residential treatment

⁴ MAT combines therapy and medications to treat substance use disorders.

⁵ For a description of each type of service, visit: http://www.ochealthinfo.com/bhs/about/aqis/dmc_ods

⁶ Recovery Residence: a sober living situation where individuals can live for up to four months while getting treatment or when stepping down from residential treatment.

programs (one for SUD treatment and one for individuals with co-occurring substance use and mental health disorders). Services will be available to Orange County residents, regardless of the type of insurance they have.

SUBSTANCE USE TREATMENT FOR INDIVIDUALS WHO ARE INCARCERATED

Addressing the treatment needs of incarcerated individuals with mental illness and/or SUD is a priority for the County of Orange under its Integrated Services Strategy. Under the strategy, SUD treatment will focus on stabilizing the individual and providing direct linkage to community services for seamless continuation of care and treatment. Upon entering into the County jail system, Correctional Health Services (CHS) nurses screen individuals for substance use. In addition, the County provides jail in-reach and reentry planning for individuals with substance use disorders. In-reach workers go into the jails to meet with individuals identified as having a substance use disorder and/or mental health issues, to identify services needed upon release from custody. MAT is currently provided to individuals in the jails who were receiving MAT prior to incarceration, or who are pregnant and have an opioid use disorder. The County is in the initial phase of starting all individuals with opioid use disorders on MAT during incarceration. At time of release, individuals are linked to treatment programs to facilitate continuity of care. State law requires that a patient at increased risk for overdose be prescribed naloxone. To address the increased risk of overdose after release,

individuals diagnosed with a substance use disorder will be given naloxone at time of release. Ensuring that individuals with substance use disorders receive MAT while in custody and linkage to treatment at time of release will help reduce the risk of overdose, and facilitate continuity of care and recovery as these individuals transition back into the community.

ADDITIONAL SUPPORT FOR INDIVIDUALS WHO ARE INCARCERATED: COMING SOON!

The Orange County Sheriff's Department (OCSD) has a plan to create housing units within the jails for individuals with substance use disorders, to enhance access to MAT and counseling. A recently-awarded MAT Access Points grant will help fund medical equipment and supplies, patient education materials, training in substance use disorders and MAT for CHS staff, and Board certification in Addiction Medicine for physicians.

HOW WILL WE KNOW IF OUR EFFORTS ARE MAKING A DIFFERENCE?

If the County's efforts are successful, in the coming years we should continue to see downward trends in opioid prescriptions, opioid-related emergency department visits, hospitalizations, and overdose deaths, and a decrease in the number of youth who report misusing prescription opioids.



Appendix

The Opioid Crisis: A Community Input Analysis

**To: Lisa A. Bartlett, Chairwoman of the Orange County Board of Supervisors,
Honorable Board Members and the Orange County Alcohol and Drug Administrator**

On behalf of the Orange County Alcohol and Drug Advisory Board (ADAB), we appreciate the opportunity to offer this report and its recommendations to policy makers, government agencies and stakeholders to address the opioid crisis in the county. The ADAB is responsible for advising the Orange County Alcohol and Drug Administrator and Board of Supervisors on substance use issues impacting the health and safety of Orange County residents and communities. It is comprised of 15 community members, appointed by the Board of Supervisors, who advocate for and provide prevention, treatment and recovery services to those in need.

The ADAB formed a workgroup with the OC Health Care Agency, Behavioral Health Services (BHS) to study the ways in which the opioid crisis is impacting individuals, families and communities throughout Orange County. The first step was to find out what needs there are, whether those needs are being met and what more could be done to reduce addiction and overdoses. Thank you to everyone who contributed their thoughts and ideas during this process.

Input was received from stakeholders from all geographic areas of the county and socioeconomic groups. Two public meetings were held, key informant interviews were conducted and an Opioid Forum was hosted in January 2018. The ADAB

conducted surveys with current and former opioid consumers, family and friends of opioid consumers, treatment providers and other community stakeholders, including those in social service agencies, medical professionals and community organizations. The goal of the surveys was to determine who is most impacted by the crisis, what prevents people from getting the care they need and determine the most needed services. The findings were then compared to the available services in Orange County and strategies and recommendations are identified in this report to address the gaps.

The ADAB recognizes and compliments the concerted efforts in both the public and private sectors to reduce opioid misuse and its consequences in Orange County. The County implemented the Drug Medi-Cal-Organized Delivery System in 2018, which provides an important funding source to expand substance use disorder services and provide Medication Assisted Treatment for opioid use disorder. Health insurers and health plans including Aetna, CalOptima, Kaiser-Permanente and Cigna have taken steps to reduce opioid overprescribing, thereby reducing the possibility of excess drugs available for non-medical use. Diversion programs are in place to treat low-level offenders with substance use disorders rather than incarcerate them. Lawsuits against pharmaceutical companies are proving effective in reducing unethical practices and obtaining funds

to provide services in the community. Prevention and treatment providers are using evidence-based practices to reduce drug misuse and help those in need reach their recovery goals.

There is still more to be done in Orange County and at the state and federal levels to mitigate opioid misuse. The ADAB offers the recommendations in this report in the areas of prevention, harm reduction,

treatment and recovery support services as a starting point for Orange County stakeholders to collaborate, enhance and expand services. Through coordinated efforts and integrated treatment, we as a community can support our residents in need and improve the quality of life for everyone.

Sincerely,

Geoffrey Henderson, Past Chair
Orange County Alcohol and Drug Advisory Board

Frederick L. Williams, Jr. LMFT, Chair
Orange County Alcohol and Drug Advisory Board

Workgroup Participants

Geoffrey Henderson, Orange County Sheriff's Department
Lorraine Martinez, Director, The Villa
Margaret Fleitman, Orange County Solace Foundation
Lauren Slivinski, Director, Phoenix Multisport
Debra Kelsey, Advisory Board Member
Sandra A. Fair, OC Health Care Agency, Behavioral Health Services, Facilitator

OC Health Care Agency Resources

OC Health Care Agency, Behavioral Health Services
OC Health Care Agency, Health Policy, Research and Communications
opioidinfo@ochca.com

“Opioid Use Disorder (OUD): Sometimes referred to as ‘opioid abuse or dependence’ or ‘opioid addiction.’ OUD is a problematic pattern of opioid use that causes significant impairment or distress.” The Centers for Disease Control and Prevention (CDC)

Overview

INTRODUCTION

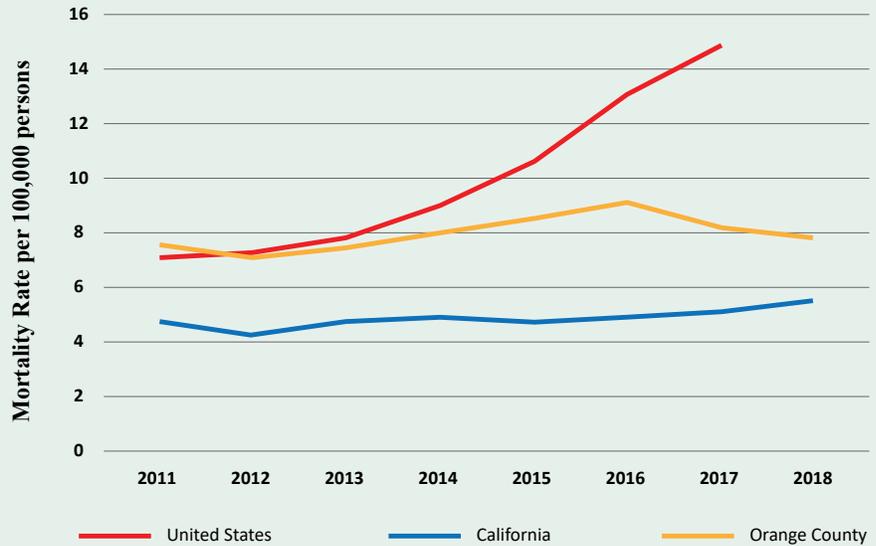
In 1999, the CDC declared a national opioid crisis. Since then the crisis has only continued to expand, impacting various regions of the country in differing degrees. Over 72,000 drug overdose deaths were reported nationally in 2017 – of which more than two-thirds involved opioids.² Moreover, in 2017, the national opioid mortality rate increased 34% over the previous year (Figure 1).

California has not experienced the levels of community devastation caused by opioids as other states have, but it has certainly been negatively impacted. Significantly, Orange County has a higher per capita rate of overdose deaths than the state of California (Figure 1) and all of the surrounding southern California counties (Figure 2).

As stakeholders, we must stay

Figure 1:

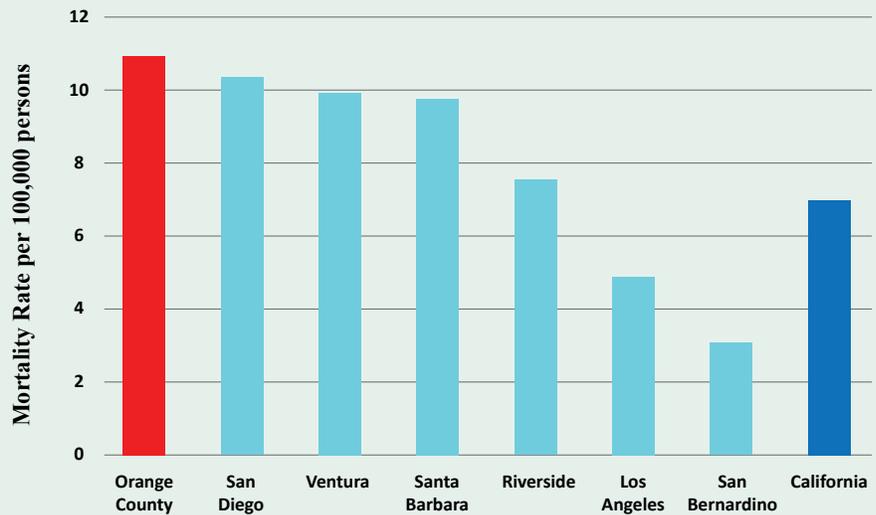
Opioid Overdose Death Rate Trends (US, CA & OC)



Source: CDC Wonder for US and California rates; California Comprehensive Death File for Orange County

Figure 2:

Opioid Overdose Mortality Rate (2013-2017; 15-64 Yr Olds)



Source: Opioid Misuse Community Assessment Tool <https://opioidmisusetool.norc.org/>

abreast of the national issues while focusing on local risks and protective factors in our communities. This report was prepared by the Orange County Alcohol and Drug Advisory Board (ADAB) in conjunction with the OC Health Care Agency (HCA), Behavioral Health Services (BHS). Recognizing continuing and increasing problems of opioid morbidity and mortality, the ADAB and BHS partnered to gather input from the community and identify current local prevention, harm reduction, treatment and recovery approaches. The team examined additional strategies aimed at limiting and reducing the scope of opioid overdoses and addiction in every socioeconomic level and geographic region in the county.

This report does not address national, state and local efforts in supply interdiction by law enforcement agencies and the pursuit of legal remedies to stop unethical medical, pharmaceutical and distribution practices. While these efforts are recognized as vital to protecting the health and safety of Orange County residents, they are beyond the scope of this report.

Sincere thanks is offered to all the stakeholders who participated in developing this report, for their thoughtful input regarding individual and community needs, as well as strategies to address those needs.

BACKGROUND

In 2017, the HCA released the 2017 Opioid Overdose and Death in Orange County Report³ that covered the opioid problems in the county through 2015. The report included the rates of opioid-related Emergency Department (ED) visits, hospitalizations and overdose deaths. It also identified relationships

between prescription use, ED visits/hospitalizations and deaths, as well as the economic and human cost of OUDs in Orange County.

Some of the main findings in the report included:

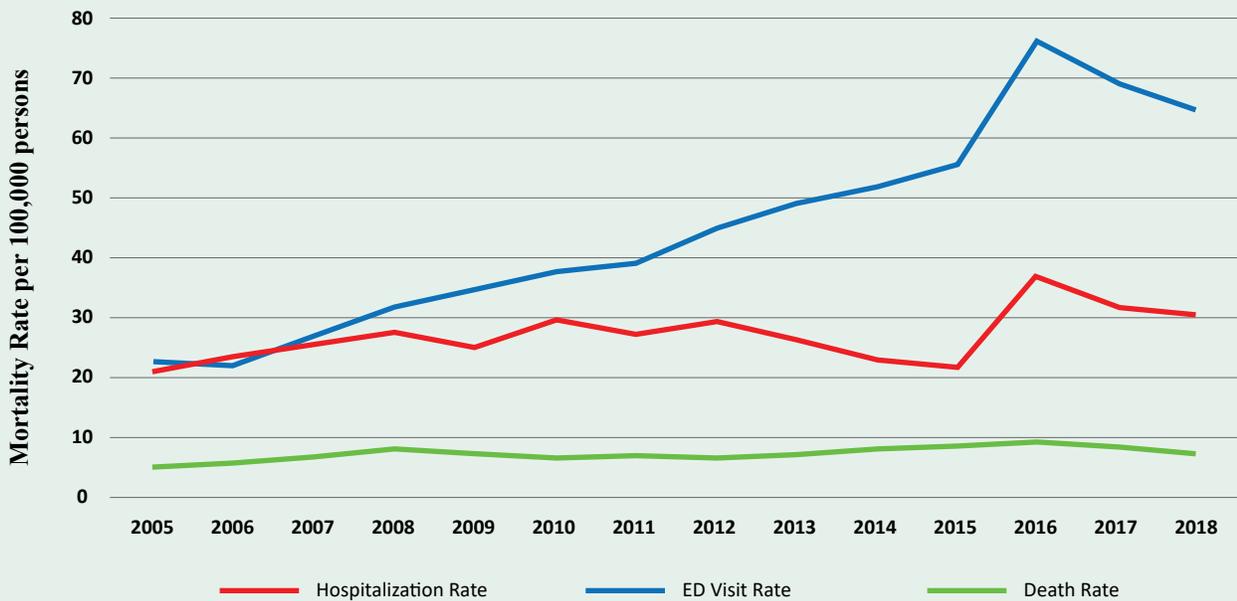
- ◆ Opioid-related ED visits more than doubled between 2005 and 2015, with the most significant increases beginning in 2011.
- ◆ Approximately 81% of opioid overdose deaths were accidental and 55% of those deaths were due to prescription opioids.
- ◆ Orange County's southern and coastal regions have more opioid prescriptions and opioid-related ED visits and deaths than other geographic regions.

More recent data for Orange County show some promising trends (Figure 3, Page 3). For example, the first decrease in opioid-related ED visits was observed in 2018 – a decline of 6% from the previous year. Similarly, the hospitalization rate also showed a decrease of about 5%.

The number of opioid deaths increased slightly each year, peaking in 2016. The number of opioid overdose deaths decreased between 2016 and 2018, from 288 to 251 deaths.

Figure 3:

Emergency Department Visits, Hospitalization and Death Rates for Opioids in OC



Source: OSHPD Emergency Department & Hospitalization Data; California Comprehensive Death File for Orange County

Ongoing surveillance of opioid morbidity and mortality in Orange County is necessary before determining if these declining trends will continue.

Between 2011 and 2018, approximately 64.2%, or 1,292 of opioid overdose deaths in Orange County were of Males (Table 1, page 4). The majority of deaths were among Non-Hispanic Whites accounting for nearly four out of every five (n=1,579, 78.5%)

opioid overdose deaths, followed by Hispanics (n=319, 15.9%), Asian/Pacific Islanders (n=59, 2.9%), Other Racial/Ethnic Groups (n=31, 1.5%) and African-Americans (n=23, 1.1%). Individuals ages 45-54 years comprised the highest number of opioid overdose deaths (n=453, 22.5%). The second largest group was 25-34 years of age (n=425, 21.1%) and the third largest was 55-64 years of age (n=420, 20.9%).



Table 1 Demographic Characteristics of Opioid-related Overdose Deaths in OC, 2011-2018

	2011	2012	2013	2014	2015	2016	2017	2018	8-yr. Avg. Rate (per 100,000)	% of 8-yr. Total
Gender										
Male	149	134	142	152	167	188	182	178	10.4	64.2%
Female	85	90	95	98	95	100	83	73	5.7	35.8%
Race/Ethnicity										
Non-Hispanic White	181	175	201	202	222	216	187	195	14.9	78.5%
Hispanic	38	31	30	37	32	52	57	42	3.7	15.9%
Asian / Pacific Islander	8	9	3	5	7	10	11	6	1.2	2.9%
African-American	2	2	3	6	1	4	3	2	6.2	1.1%
Other	5	7	0	0	0	6	7	6	4.7	1.5%
Age										
10-17	5	0	1	2	1	0	1	0	0.4	0.5%
18-24	26	29	31	19	25	26	40	40	9.2	11.7%
25-34	45	44	40	53	63	59	67	54	12.3	21.1%
35-44	45	31	41	45	40	44	44	45	9.9	16.7%
45-54	72	69	67	56	48	65	35	41	12.4	22.5%
55-64	32	37	45	56	62	73	57	58	14.1	20.9%
65+	9	14	12	19	23	21	21	13	4.0	6.6%
Total	234	224	237	250	262	288	265	251	8.0	

Source: California Comprehensive Death File

Similarly, the groups most at-risk based on their rate of opioid-related overdose death included Males (10.4 per 100,000), Non-Hispanic Whites (14.9 per 100,000), Young Adults (25-35 years) at 12.3 per 100,000, as well as Adults ages 45-54 years (12.4 per 100,000) and Adults ages 55-64 years (14.1 per 100,000).

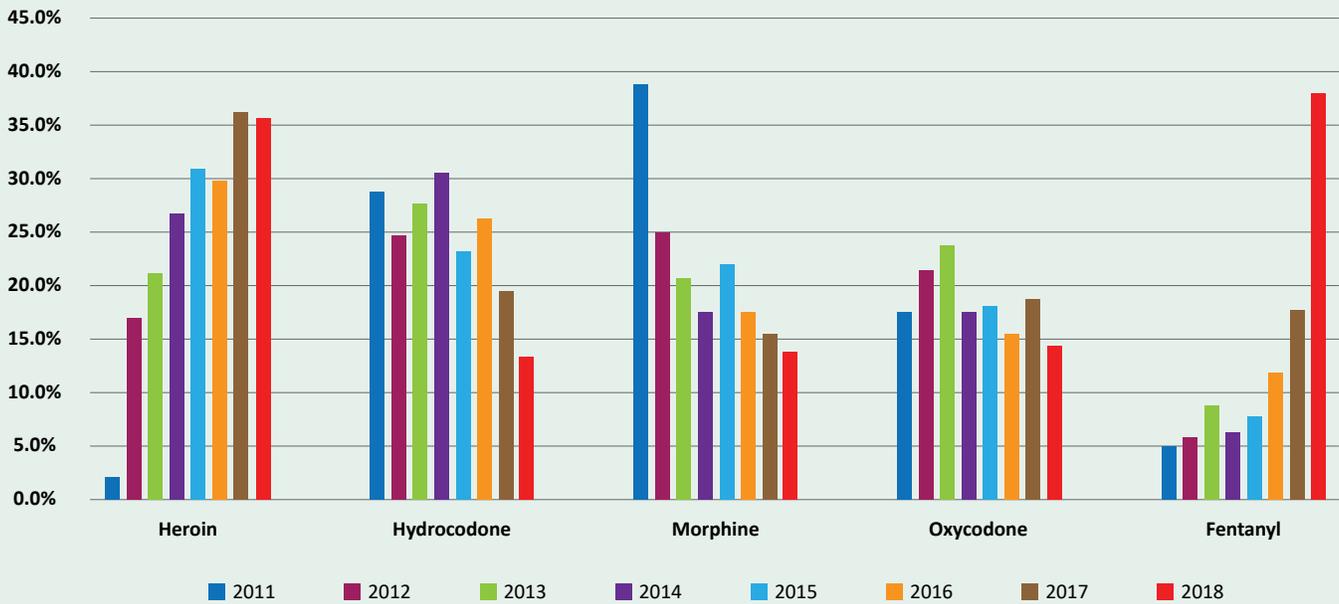
OPIOID DRUGS

Heroin, hydrocodone, morphine, oxycodone and fentanyl are the most common opioids found among opioid overdose deaths (Figure 4, Page 5). Heroin was found in 29% of overdose deaths followed by hydrocodone (27.8%), morphine (24.1%), oxycodone (20.5%) and fentanyl (14.3%) between 2011 and

2018. However, hydrocodone, morphine and codeine involvement in deaths demonstrated a decreasing trend from 2011 to 2018, while oxycodone involvement in deaths remained relatively stable through this time-period. Importantly, the percentage of heroin and fentanyl involved in overdose deaths, increased significantly.

Figure 4:

Percent of Opioid Used in Overdose Death in OC*



Source: OC Sheriff-Coroner.

*Drug cause of death may indicate more than one type of opioid

COMMUNITY ASSESSMENT

The ADAB and BHS formed a workgroup to review available services, gather information and input from all impacted stakeholders and examine strategies to mitigate the crisis.

The strategies identified, correlate to the necessary services to address opioid misuse defined by the federal Substance Abuse and Mental Health Services Administration (SAMHSA):

- ◆ Prevention: Interventions intended to prevent or reduce the risk of developing a behavioral health problem, such as underage alcohol use, prescription drug misuse and illicit drug use.
- ◆ Harm Reduction: A set of practical strategies and ideas aimed at reducing negative consequences associated with drug and alcohol use.
- ◆ Treatment: A system to develop a higher level of social functioning, including individual and group counseling, inpatient and residential treatment, intensive outpatient treatment, case or care management.
- ◆ Recovery: A process of change through which individuals improve their health and wellness, live a self-directed life and strive to reach their full potential.

METHODOLOGY

The ADAB and BHS reached out to all impacted stakeholders through a variety of methods. Four surveys were developed targeting: a) current and previous opioid consumers, b) family and friends of opioid consumers, c) treatment providers and d) interested community stakeholders. The surveys were available for an average of four months, both online and in hard copy, in English and Spanish. These were advertised on the HCA website and Facebook page and a press release was issued. The survey links were provided to all County-operated and contracted treatment providers, collaboratives and coalitions, prevention, and outreach and engagement providers. Written invitations to participate were sent to the over 600 state certified and/or licensed treatment programs and to all identified physicians certified to provide buprenorphine in the county. Posters requesting input were located at all treatment locations and in every Orange County library. Over 800 people from all socioeconomic groups and geographic regions of the county responded to the surveys.

In addition to surveys, the ADAB workgroup used networking and outreach to increase their knowledge of the issues. Two public hearings were held, input was requested and provided at multiple public events and relevant meetings, subject matter experts were interviewed, research materials reviewed and a large public forum was held in January 2018, which was live-streamed on Facebook, to share learnings and receive feedback.

The goal of these survey and public input efforts was

to learn who is abusing opioids, why, how they got started and to determine:

- ◆ Populations most impacted and in need of services
- ◆ Services most needed in Orange County
- ◆ Barriers to receiving needed services
- ◆ What else is needed to mitigate the opioid crisis

OVERVIEW OF STAKEHOLDER INPUT

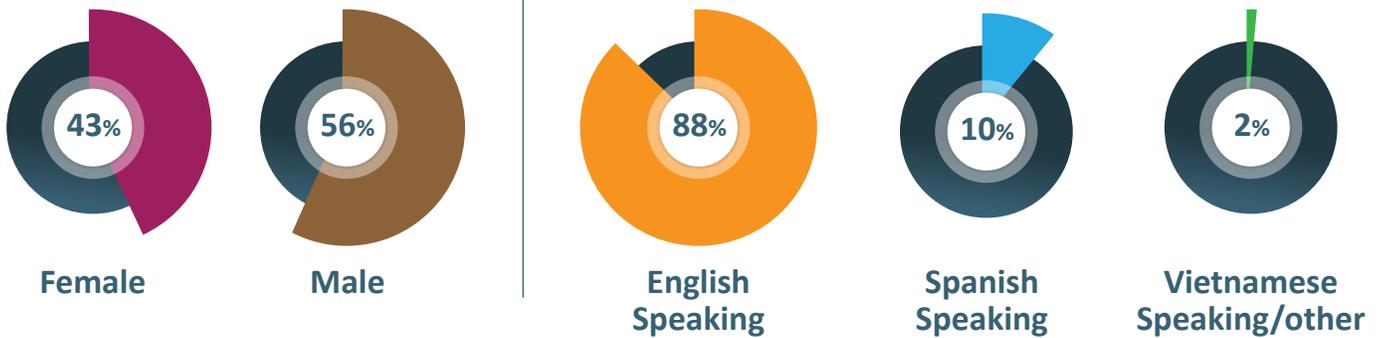
Input received from all of the community meetings and interviews was comparable to the survey results, which were analyzed, summarized and are available by request at opioidinfo@ochca.com. The four separate convenience sample surveys include the responses of 326 current and past opioid Consumers, 80 Family/Friends of opioid consumers, 302 treatment Providers and 95 community Stakeholders including medical professionals, representatives of social services agencies, community-based organizations and other organizations serving individuals and families experiencing these issues.

PERSPECTIVES OF CONSUMERS AND FAMILY/FRIENDS

Who responded to the surveys?

Consumer respondents (n=326) were primarily adults ages 26-45 (56%), 25% were age 46 or older, 16% were 18-25 years old and 3% were under 18 years of age. Most were either Non-Hispanic White (55.6%) or Hispanic (40.6%). The remainder identified as Asian (2.1%), African-American/Black (1.4%), and Native Hawaiian or other Pacific Islander (<1%). A little over half of respondents were male (56%) and 43% were female. The majority of respondents (88%) spoke

Consumer Respondents



1% did not identify

English as their primary language, followed by 10% Spanish and 2% Vietnamese/other. Almost half (46%) of Consumers had private health insurance, 25% had Medi-Cal, 1% Medicare, while 22% percent did not have any insurance. The remainder did not specify coverage.

While 326 Consumers participated in the survey, their response rates often dropped off precipitously when asked questions about their drug overdose history, arrests and incarcerations. The lower rates of response may be due to the stigma associated with addiction, even though the surveys were anonymous.

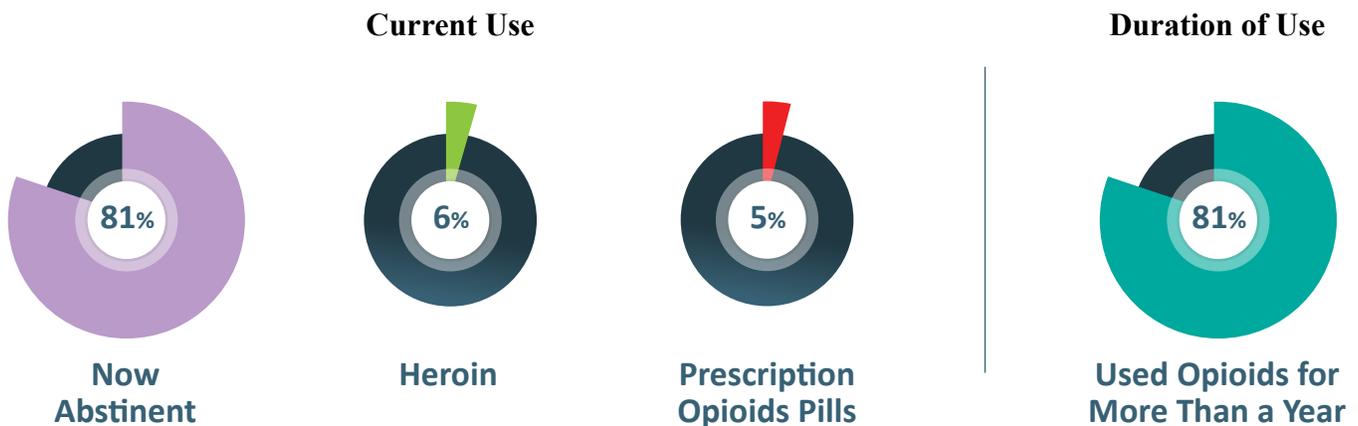
The majority of the Family/Friend respondents (hereafter Family, n=80) were a parent (36%),

sibling (19%) or child (17%) of the opioid user. The remainder identified as other relatives, spouses and friends.

Opioid Use History

The majority (approximately 81%) of Consumers reported being currently abstinent, while a small percentage admitted current usage of opioid pills (5%) or heroin (6%), and 9% indicated they were currently receiving medication assisted treatment (MAT) including methadone maintenance. Only 78 Consumers responded to the use history question, but the vast majority (81%) of those who did, reported having used opioids for more than a year.

Family respondents reported that they were either



unaware of their family member’s opioid use (29%) , the family member was completely abstinent (27%), was currently using opioids (48%), with the remaining receiving medication assisted treatment including methadone. The vast majority (96%) of Family respondents indicated their family member had been using opioids for more than a year. The difference in abstinence reporting may be due to Consumers being enrolled in a treatment program at the time they responded, compared to Family respondents including those whose family members may not be receiving treatment.

Over half of Consumers indicated that they got their start with opioid use via friends (50.7%) and a smaller percentage cited family (8.5%) as their source of initiation. When percentages for receiving drugs from family or friends are combined, almost 60% initially

received the drugs from people they know. Over one-third (36.6%) started with prescribed opioids for an illness or injury.

When reporting the first opioid used, Consumers often selected more than one drug (Table 2). The majority (60%) of Consumers first started using prescription opioids while one-third (33%) started with heroin, 11% started with fentanyl, and the remainder started with other drugs, including methadone. Nearly 4 in 10 (37%) started with prescription opioids and subsequently moved onto heroin. In contrast, very few users started with heroin and transitioned to prescriptions (7%). Approximately 19% have used only prescription opioids and 19% have used only heroin. A very small percentage (3%) began by using opioid pills and heroin at the same time.

Table 2 First Opioid Used Reported by Consumers

Answer Choices	No.	%
Prescription drugs (pills) first and then started heroin	105	37%
Prescription drugs (pills) only, no heroin	54	19%
Heroin first and then started prescription drugs (pills)	21	7%
Heroin only, no prescription drugs (pills)	54	19%
Both prescription drugs (pills) and heroin at about same time	10	3%
Other *	42	15%
Answered	286	100%

*In addition to opioids/heroin above, some Consumers listed ‘Other’ type of drugs such as cocaine and methamphetamine.

Opioid Overdose History

Nearly one-third (28%) of Consumers reported having overdosed on opioids and 43% had witnessed someone else overdose on opioids. The majority (71%) of Consumer respondents had not visited the emergency room nor been hospitalized for opioid treatment, while 29% had been. Over half (54%) of Consumers who reported going to EDs for an opioid overdose, reported not receiving information about treatment upon release.

In surveys, 60% of Family reported that their family member had previously overdosed on opioids, compared to self-reports by Consumers (28%). Sixty percent (60%) of Family also reported that their opioid user had been treated in EDs for an overdose.

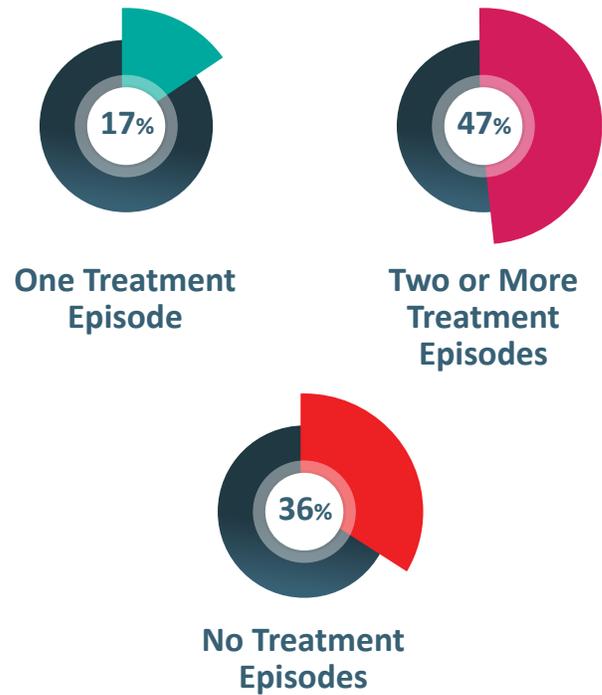
Opioid Treatment History

Almost half (47%) of Consumer respondents received a least two episodes of treatment, while 17% participated in only one episode. Moreover, approximately 40% of Consumers had been prescribed medication to help their recovery at some point, with most reporting that they took the medication as prescribed or took the medication, but not consistently. More than 1 in 3 Consumers (36%) reported never having received any treatment.

Criminal Justice Involvement

Nearly half of Consumers (48%) had been arrested on at least one drug charge. Of the 38 Consumers who reported having been previously arrested, 68% served time in prison for drug charges. Similarly, only a small number of Consumers (n=18) had ever participated in a Drug Court program. Conversely,

Prior Treatment History



nearly 60% of Family respondents said their family member had been arrested for drug charges and almost half had served time in jail/prison for drug charges.

PERSPECTIVE OF PROVIDERS

Treatment Programs Available

Several different types of treatment programs were represented in the Provider survey results including outpatient substance use treatment, residential substance use treatment, community health centers and clinics, detox and private therapy/counseling services. The 302 Provider respondents offer a range of services necessary to treat opioid and other substance use disorders.

Providers across the county reported serving all age groups with 18 to 45 year olds being the most

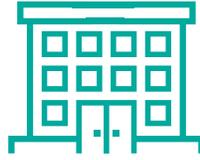
Treatment Programs



Detox



Outpatient Services



Drug and Residential Treatment Center



Medication Assisted Treatment

common. All major racial/ethnic groups are served as well as services being available in more than six languages (e.g., English, Spanish, Vietnamese, Farsi, Korean and Arabic).

All major insurance types are reportedly accepted by Providers (e.g., Private, Medi-Cal and Medicare) including 31% who indicated all services are free.

About half (46%) of all treatment providers reported offering medication assisted treatment (MAT) e.g., Suboxone and Vivitrol, and a quarter of those offer methadone maintenance. Approximately 40% of providers do not offer MAT.

While 38% of Providers reported that none of their clients received MAT from any source, 62% reported that some to most clients do receive MAT.

PERSPECTIVES ON NEEDS AND SERVICES OF CONSUMERS, FAMILY/FRIENDS, PROVIDERS & STAKEHOLDER GROUPS

Who is most in need of opioid prevention and/or treatment services?

There was consensus among all community stakeholders and survey respondent groups

(Consumers, Family/Friends, Providers & Stakeholders) regarding which groups are most in need of services. These high need groups include: young adults, teens, people dealing with chronic pain, the homeless, those with co-occurring mental illness and those recently released from jail.

What are the main barriers and challenges to getting help?

The main barriers and/or challenges faced by those needing help with opioid use disorder also had a commonality across all four survey groups and stakeholders, and reflect problems accessing systems of care. Specifically, the cost of services and/or lack of insurance were the main obstacles to getting help. For Consumers, their Family and Providers, challenges to getting into a treatment program also included: social and personal (self-imposed) stigma, denial/lack of wanting help, delays (e.g., long wait lists), not knowing where to go, lack of transportation and/or being denied re-admission due to prior relapse. Consumers also listed lack of access to medical, detox and other affordable treatment.

What services are most needed?

Across all Stakeholder groups, respondents cited the need for more low/no-cost, evidence-based services including inpatient and residential drug treatment, detox and outpatient programs. They also believe there is a need for more programs to treat co-occurring addiction and mental health problems. In addition, a common theme was to put greater emphasis on prevention including educating children, teens and parents about the dangers of opioids, increasing surveillance of doctors who prescribe opioids and patients most at risk of misuse/addiction, while employing harm reduction methods to reduce risks of overdose deaths.

Stakeholder support for MAT is mixed. Most Stakeholders indicated that they support MAT for opioid addiction (56%). However, 34% were unsure and 10% did not support MAT.

The majority of all Stakeholders think that naloxone should be available at treatment centers for distribution to people at high risk, as well as with police and other first responders to revive an opioid overdose. Moreover, survey results suggest that a majority of Consumers, Family members and

Providers have knowledge about naloxone, but few carry it or have administered it.

Almost all responses addressed the need for naloxone availability. Most of the Consumers who responded (70%) have some knowledge or experience with naloxone and 40% have received training on its use. Eight percent (8%) have administered it. Thirty percent (30%) did not have any knowledge or experience with its use.

Most Family respondents (61%) have some knowledge of how to use naloxone. A smaller percentage have been trained in its use with some carrying it (15%), and others who do not carry it (6%). Only 1.5% of Family respondents have actually administered the naloxone and 22% had no knowledge/experience with it.

The majority (75%) of responding Providers had some knowledge of naloxone, also sold under the brand name Narcan, including many who have been trained in its use (38%), and almost 5% who have administered the drug to an overdose victim. Twenty-five percent (25%) did not have any knowledge or experience.



SUMMARY OF FINDINGS

Participants from a broad range of backgrounds and experiences, including Consumers, Family/Friends, Providers and Stakeholders, provided input that highlighted the need for:

- ✓ Education about opioid misuse
- ✓ Increased surveillance and education for doctors who prescribe opioids and of patients most at risk of misuse
- ✓ Harm reduction approaches including wider distribution of naloxone
- ✓ More accessible and affordable drug treatment programs including detox, inpatient, residential and outpatient services
- ✓ Medication assisted treatment including methadone

The recommendations in this report are based on stakeholder input and relate to specific objectives in the identified areas of prevention, harm reduction, treatment and recovery support and seek to:



Prevent the misuse of opioids through effective education campaigns, improved prescriber practices, screening to determine risk factors and reducing opioid diversion for non-medical uses through national and local campaigns.



Reduce the health risks of those still actively using opioids, using overdose reversal drugs, providing immediate access to treatment and utilizing evidence-based practices to reduce the spread of infectious diseases.



Ensure timely access to appropriate treatment services, addressing the individual needs and goals of those seeking assistance.



Support continuing recovery through non-clinical supportive services and involving all impacted stakeholders to strengthen families and communities.

OBJECTIVES & RECOMMENDATIONS

Prevention

Objective: Prevent/reduce misuse of opioids

- 1. Recommendation:** Community organizations should evaluate community needs and assets, and then develop low or no-cost community based social, recreational and educational programs for youth, young adults, and families in healthy, safe, drug-free environments.
- 2. Recommendation:** Policymakers, the HCA, schools and community organizations should seek funding and services available through the California Department of Health Care Services (DHCS) State Opioid Response Grant (SOR) to expand prevention services utilizing a data-driven approach, including the use of targeted educational and multimedia campaigns to underserved groups such as foster youth, young adults, older adults and parents.
- 3. Recommendation:** Policymakers, the HCA and community stakeholders should increase community education through social marketing and support national and local medication safety campaigns.
 - 3a.** Policymakers and the HCA should encourage pharmacies to put Monitor, Secure, Destroy
 - informational messaging on their packaging and to provide collection sites, packets to destroy drugs, or pre-paid mail back envelopes for unused meds.
- 3b.** Policymakers should encourage: 1) health centers and hospitals with on-site pharmacies as well as local political jurisdictions to establish authorized year-round drug collection sites, and (2) County organizations and community partners to review applicable grants (e.g. the DHCS SOR Grant expansion project) to determine benefits of establishing local drug take back campaigns.
- 4. Recommendation:** Policymakers, the Hospital Association of Southern California (HASC), health and medical associations and insurers should promote the expanded use of Screening, Brief Intervention and Referral to Treatment (SBIRT) by physicians, psychiatrists, emergency departments and schools to screen for alcohol and other substances, including opioids.
- 5. Recommendation:** Policymakers, the HASC, health and medical associations should increase pressure on insurers to provide appropriate reimbursement for non-medication treatments including acupuncture, physical therapy, biofeedback, chiropractic treatment, etc., to reduce opioid prescriptions and dosage levels.

Harm Reduction



Objective: Overdose victims receive timely medical assistance

6. Recommendation: Health professionals, treatment providers and law enforcement should always advise persons of their legal protections when assisting at an overdose.

6a. Physicians, pharmacists and treatment professionals should advise consumers, family members and the community about Good Samaritan laws when prescribing opioids and in conjunction with naloxone training and distribution.

6b. Law enforcement agencies should continue training and monitoring field services to ensure Good Samaritan laws are applied to everyone equitably.

Objective: Prevent overdose deaths

7. Recommendation: All organizations eligible to administer or distribute naloxone should ensure naloxone is readily available.

7a. All first-responders should be trained to administer naloxone and have it available.

7b. Emergency Departments (EDs), jails and

treatment programs should establish methods to evaluate those who may need naloxone and provide it to those determined to be at risk for overdose upon release.

7c. Primary care physicians should include naloxone as a standing order when prescribing opioids for both acute and chronic pain and pharmacists should advise customers about the availability of naloxone in the event it is not co-prescribed.

7d. Prescribers and pharmacists should discuss the use of naloxone with caregivers and family members, and provide or make available training on its use.

7e. Policymakers, the HCA, health professionals and community stakeholders should support the lifesaving efforts of community organizations interested in providing naloxone to opioid consumers, by seeking all funding opportunities for naloxone, including the SOR naloxone grant, which has approximately \$20 million available.

8. Recommendation: The HCA, first responders, law enforcement and interested stakeholders should develop a surveillance system capable of identifying multiple overdoses within communities, through a stakeholder communication system, to enable immediate response.

Objective: Engage people in treatment upon identification of need

- 9. Recommendation:** Hospitals, stakeholder agencies and health professionals should research successful programs and seek funding opportunities to establish Substance Use Disorder (SUD) in-reach programs in Orange County hospital EDs.
- 10. Recommendation:** The Orange County Sheriff's Department (OCSD) and the HCA should fully implement the linkage component of the in-custody/post-custody services identified as a strategic priority in the Orange County 2017 Strategic Financial Plan, as funding and resources are available.
- 11. Recommendation:** Community organizations should expand Outreach and Engagement Programs using the HCA BHS Outreach and Engagement and Drug Free Anaheim Models.

Objective: Reduce spread of infectious diseases

- 12. Recommendation:** Policymakers, health professionals and the HCA should explore the benefits of providing health care products at the SUD intake and referral program that will be part of the new Be Well Orange County Behavioral Health Campus.

- 13. Recommendation:** Policymakers, health professionals, public safety agencies and community organizations should consider both the costs and benefits of internationally recognized harm reduction models, in addressing any increasing rates of infectious diseases, related to injection drug use. These include effective, safe needle exchange programs (NEP).



Treatment



Objective: Increase access to evidence-based Medication Assisted Treatment (MAT)

Objective: Provide timely access to an affordable continuum of care

14. Recommendation: The HCA, health plans and stakeholders should collaborate to develop a MAT educational anti-stigma campaign, to increase access to services.

15. Recommendation: All treatment and health professionals, regardless of the type of treatment or setting, should provide or link consumers to MAT, when clinically indicated.

15a. HASC, the HCA and health insurers should collaborate to identify funding and begin MAT induction in EDs and hospitals. This should be coupled with harm reduction strategies of in-reach and case management to link patients to continuing services upon release.

15b. MAT should be offered to inmates as part of treatment in the proposed in-custody treatment program, identified as a priority in the County's 2017 Strategic Financial Plan, with linkage to continuing treatment upon release.

16. Recommendation: The HCA and narcotic/opioid treatment (NTP/OTP) providers should partner to establish the proposed NTP/OTP in south county.

17. Recommendation: The HCA should use available funding sources to maintain and expand publicly funded services, including continuing the Drug Medi-Cal-Organized Delivery System (DMC-ODS) contract with the DHCS to ensure a revenue source for expanded services.

18. Recommendation: All privately operated and publicly funded programs should provide or make available affordable and easily accessible services in all treatment modalities and levels of care, to meet consumer needs.

18a. The HCA BHS should recruit additional residential treatment providers for underserved populations. Residential programs that are DMC certified may contract with the County to provide these services.

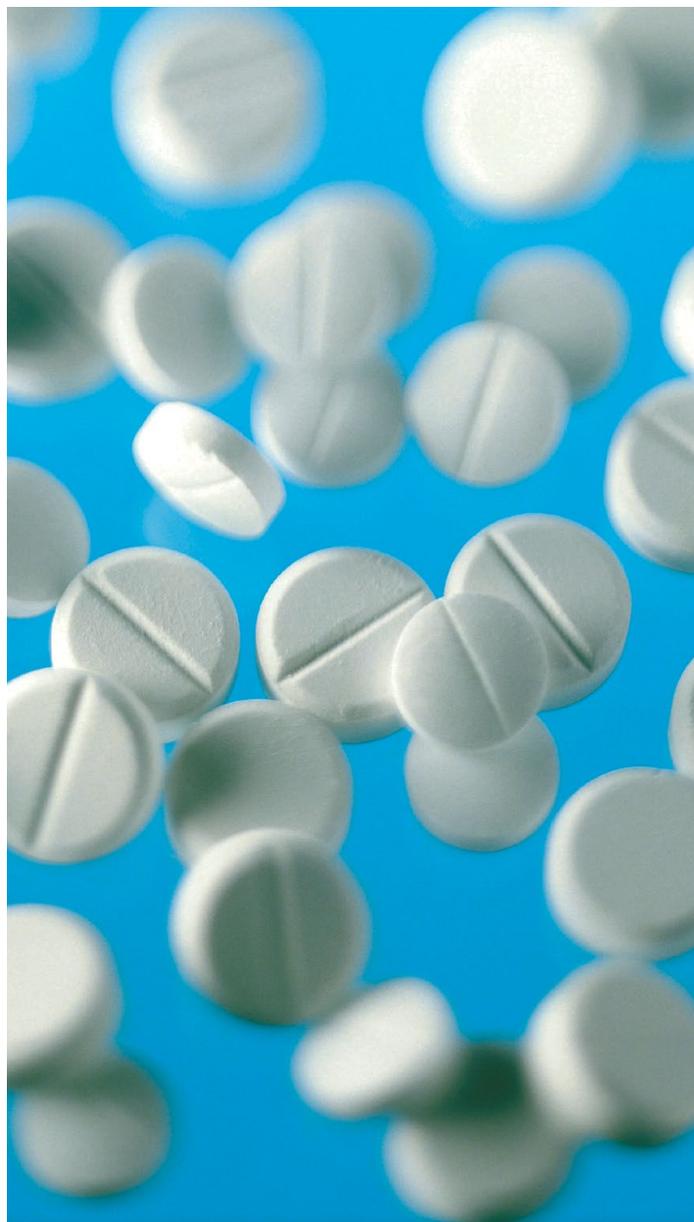
18b. The Orange County Sheriff's Department (OCSD), policymakers, the HCA Correctional Health Services (CHS) and treatment providers should partner to implement the County's proposed in-custody SUD treatment program.

18c. Policymakers, criminal justice organizations, the HCA and stakeholders should research diversion programs in other locales for possible ways of expanding Orange County programs as funding is available.

19. Recommendation: The HCA should continually evaluate promising treatment practices from other areas of the country to determine benefits to Orange County.

19a. The HCA and treatment providers should explore the use of telemedicine to determine any benefits for use in SUD programs.

19b. The HCA and the Social Services Agency should evaluate benefits of family-based programs in Orange County and if appropriate, apply for funding as it becomes available.



Recovery Support



Objective: Individuals are able to self-manage their health and their recovery

20. Recommendation: The HCA BHS should expand the populations able to utilize certified, well-managed sober recovery residences while in treatment and increase the number of contracted, certified recovery residences, including those for families, as funding becomes available.

21. Recommendation: Policymakers should encourage legislators and DHCS to establish and/or enforce uniform guidelines for both independently operated and program associated residential recovery homes.

22. Recommendation: Colleges and universities in Orange County should review the current peer support programs on their campuses and evaluate the benefits of developing a Collegiate Recovery Program for young adults in recovery.

23. Recommendation: Programs providing non-clinical recovery support services should develop and maintain relationships with programs and services to ensure appropriate referrals and linkages to ancillary services including educational and vocational assistance, family support, transportation, socialization and advocacy with other agencies serving the same populations.



Strategies, Objectives & Recommendations



PREVENTION

Prevention is the most effective defense against drug misuse, addiction and overdose. In recent years, prevention planners and policy makers have focused on identifying populations with differing prevention needs. To this end, the Institute of Medicine’s model of prevention describes three concepts for targeting individuals or groups with interventions: universal, selective and indicated approaches.⁴

- ◆ Universal prevention approaches include the use of prevention strategies to educate and inform large segments of the general population about risk and protective factors. These strategies can create shifts in both individual attitudes and community norms that can have long-term, substantial effects.
- ◆ Selective prevention strategies focus on groups which may have specific factors that put them at increased risk of substance misuse by helping individuals develop the knowledge, attitudes and skills they need to make good choices or change harmful behaviors. Many of these strategies can be classroom-based.
- ◆ Indicated prevention services are provided to those exhibiting early signs of substance misuse and/or other related problem behaviors associated with substance misuse and targeting

them with specific interventions. Although the individual may be experimenting with drugs, a clinical diagnosis of substance use disorder cannot be made.

Based upon input received from Orange County stakeholders, the primary prevention services needed in Orange County are: education and prevention programs focused on dangers of opioids for youth and adults, opioid prescriber education and monitoring, and methods to prevent diversion of opioids for non-medical use.

Objective: Prevent/reduce misuse of opioids

The following factors are involved with increasing opioid overdoses:

- ◆ Increased risk factors for substance abuse
- ◆ Increased access to opioids
- ◆ Overprescribing
- ◆ Increased availability of inexpensive heroin and synthetic opioids

1. Recommendation: Community organizations should evaluate community needs and assets, and then develop low or no-cost community based

social, recreational and educational programs for youth, young adults and families in healthy, safe, drug-free environments.

The 2016 Surgeon General's Report on Alcohol, Drugs and Health identified the protective factors that lower the risk of youth using alcohol or other drugs.⁵ These protections include being in a caring environment at home and in school, knowing their families have expectations and goals for their children and opportunities for meaningful participation in productive activities in the community.

There is a wide range of school-based, park and recreational programs offered throughout Orange County. They provide opportunities for young people to socialize, develop skills in leadership and communication and to actively participate in sports. They may, however, be too costly for many to participate. Programs such as the Orange County Department of Education's Friday Night Live Partnership which is a countywide, HCA-funded school based activity, other community agencies and faith-based organizations (funded by HCA), and no-cost programs such as the Community Outreach Alliance (COA) in San Clemente, engage youth in a multitude of activities to allow youth the opportunity for meaningful participation in their areas of interest and talents. The availability of additional programs can reduce the incidence of risky behavior.

2. Recommendation: *Policymakers, the HCA, schools and community organizations should seek funding and services available through the California Department of Health Care Services*

(DHCS) State Opioid Response Grant (SOR)⁶ to expand prevention services utilizing a data-driven approach, including the use of targeted educational and multimedia campaigns to underserved groups such as foster youth, young adults, older adults and parents.

In the National Survey of Drug Use and Health (NSDUH) 2016 report⁷, parent involvement was cited as critical in reducing use of drugs. Yet when asked, 24% of school age youth said their parents do not talk to them about the dangers of opioids and 57% of parents responded to questions indicating they did not believe they needed to take steps to prevent their children from having access to family members' prescription medications. This is inconsistent with the responses of over 50% of opioid consumers nationally⁸ and almost 60% of opioid consumer survey respondents who reported they started taking opioids when they got them from friends and family.

There is a robust system of prevention services in Orange County.⁹ The HCA provides prevention services through Behavioral Health Services (BHS) Alcohol and Drug Education and Prevention Team (ADEPT) and BHS Prevention and Early Intervention (PEI) to ensure there are evidence-informed prevention services implemented on a universal, selective and indicated level in Orange County.

There are also multiple coalitions focusing on substance use prevention activities in the county. These include: Orange County Prescription Abuse Prevention Coalition (OCPAPC), OC Substance Abuse Prevention Network (OCSAPN), Drug Prevention

Coalition of Mission Viejo, and the National Council on Alcoholism and Drug Dependence-Orange County, South Orange County Coalition. Selective approaches in school-based prevention services are generally best to reach youth. This is also effective in identifying those youth needing indicated, targeted services. While youth make up 8.1% of population, 50.4 per 1,000 (5%) are reached in prevention programs in schools.¹⁰ The Orange County Department of Education, school districts and the HCA continue to collaborate to reach youth throughout the county in schools with targeted prevention services.

The HCA uses universal prevention approaches throughout the county, providing information and education at forums and public events. Staff educates parents, adults and seniors on how to monitor their prescriptions carefully and to destroy those no longer needed. This is one way to begin to educate parents who may be naïve about opioid use by adolescents.

3. Recommendation: *Policymakers, the HCA and community stakeholders should increase community education through social marketing and support national and local medication safety campaigns.*

Prescribed opioids are often diverted for non-medical use. As indicated, almost 60% of survey respondents said they initially obtained opioids from friends or family. Many of these opioids are simply taken, unbeknownst to the owners, because they are easily accessible in unsecured locations in peoples' homes.

3a. *Policymakers and the HCA should encourage pharmacies to put Monitor, Secure and Destroy informational messaging on their packaging and to provide collection sites, packets to destroy drugs, or pre-paid mail-back envelopes for unused meds.*

Monitor, Secure and Destroy campaigns are effective in educating the public about keeping opioids and other drugs secure and out of reach of those potentially vulnerable to unintended use. The HCA ADEPT and local community coalitions such as the Drug Prevention Coalition of Mission Viejo, provide community education on methods to destroy unused medications. ADEPT also provides biodegradable bags to irretrievably dispose of medications and Walmart is now providing a gel packet with each opioid prescription to dispose of unused medications in the home.

3b. *Policymakers should encourage: 1) health centers and hospitals with on-site pharmacies as well as local political jurisdictions to establish authorized year-round drug collection sites, and (2) County organizations and community partners to review applicable grants (e.g. the DHCS SOR Grant expansion project) to determine benefits of establishing local drug take back campaigns.*

Medication drop boxes, currently at 25 different locations throughout Orange County, increase safe disposal of drugs, but not all accept controlled medications. These sites are posted on the HCA website, <http://www.ochealthinfo.com>. Twice a

year the federal Drug Enforcement Agency sponsors national Drug Take Back Day. These events are well organized with state and local partners and result in the collection of tons of unused medications throughout the country while providing educational opportunities for community members to learn about opioid misuse. DHCS is seeking to increase the number of campaigns in California by offering grants through the SOR Grant Expansion Project 2.0 to local organizations.

4. Recommendation: *Policymakers, the Hospital Association of Southern California (HASC), and health and medical associations should promote the expanded use of Screening, Brief Intervention and Referral to Treatment (SBIRT) by physicians, psychiatrists, jails, emergency departments and schools.*

SBIRT involves screening those at-risk of, or experiencing substance misuse problems. Studies performed by the World Health Organization showed a 60% decrease in substance use among those screened and provided a brief intervention.¹² There are validated screening tools identified by the National Institute of Drug Abuse (NIDA),¹³ including Quick Screen and the Opioid Risk Tools that can be used in many medical and treatment settings, as well as be self-administered. CRAFFT, which stands for Car, Relax, Alone, Forget, Friends, Trouble, is a validated screening tool for adolescents and is used for screening in the HCA Children and Youth Behavioral Health Services (CYBH). Screenings are conducted in the CalOptima provider network,

as well as in some community health centers and Federally Qualified Health Centers (FQHCs). The HCA used SBIRT to screen persons experiencing homelessness relocated from the riverbed in 2018. This effective tool is proven to identify those at-risk of developing substance use disorders, to provide brief interventions and to refer to additional treatment if needed.

The President's Commission recommended every 7th grader and 10th grader, as well as college freshman, be screened for risk of behavioral health problems at the start of the school year.¹⁴ The information could then be used to ensure appropriate services are made available based upon the identified risks to the individual. Children's Hospital of Orange County (CHOC), recognizes the benefits of SBIRT and has been educating pediatricians throughout the county, under a grant from Centers for Medicare and Medicaid Services (CMS), on childhood issues related to parental opioid misuse, using SBIRT for adolescents and recognizing signs of misuse. There are also on-line self-administered screening tools available for college students, including Quick Screen.

SBIRT is not used routinely by physicians or psychiatrists, in office settings or Orange County EDs, even though it is used in acute settings in other parts of the country. It is also not used routinely in Orange County school districts. It is recognized that while medical professionals may bill for this service, it may require increased health staff resources in the schools. A continuum of care must also be identified, funded and in place to serve those in

need of additional services to fully implement the recommendation to increase use of SBIRT.

5. Recommendation: *Policymakers, HASC and health and medical associations should increase pressure on insurers to provide appropriate reimbursement for non-medication treatments including acupuncture, physical therapy, biofeedback, chiropractic treatment, etc., to reduce opioid prescriptions and dosage levels.*

The number of opioid prescriptions and dosage levels began increasing in the 1990s for both acute and chronic pain, with corresponding increases in addiction and overdoses. Federal, state, local governments, health professionals and providers recognize reducing overprescribing, both in number of pills and dosage level, is a vital strategy to reducing Opioid Use Disorders (OUD).

Actions have been taken at all levels of government, by insurers and health plans, with a resulting decrease in the number of prescriptions per capita throughout the country. The federal Department of Health and Human Services has committed to addressing this problem, as have national coalitions including the Surgeon General's Turn the Tide RX,¹⁵ and The Addiction Policy Forum Prevention Initiative.¹⁶ A local coalition, SafeRX, worked to ensure prescribing policies are in place in EDs throughout the county. The National Institutes of Health¹⁷ (NIH) is conducting research into non-opioid analgesics. It is also exploring benefits of alternative pain treatments including acupuncture, chiropractic care, biofeedback and physical therapy. Curricula

are now being required in both medical and dental schools, and in pharmacy and nursing programs to improve knowledge about drug misuse, addiction, prescribing practices and treatment. There are also efforts by legislators and policymakers to get insurers to provide appropriate reimbursement for alternative pain treatments.

The majority of opioids are prescribed in an office visit. In 2016, the CDC published prescribing guidelines for opioid pain relievers in office settings¹⁸ and Prescription Data Monitoring Programs (PDMP) have been implemented throughout the country. PDMPs provide physicians and pharmacists with the medication history of the patient. This can limit "doctor shopping," identify fraudulent and medical malpractice, and improve prescribing practices, while limiting diversion for non-medical use.

California was the first to implement a PDMP, by establishing a pilot for the Controlled Substance Utilization Review and Evaluation System (CURES) in 1996, based upon the triplicate prescription program of 1940. It became permanent in 2003, but as in many areas of the country, its use was not mandatory. The Department of Justice has now certified the CURES program and as of October 1, 2018, California physicians in an office setting, are required to check the patient prescription history on the database before giving a new prescription for opioids and must do so at least every four months for continuing patients. Hospital and ED physicians do not need to check the CURES database but can only provide a five day prescription with no refills if they do not.

While Medicaid patients nationwide receive more opioid prescriptions than those covered by private insurers, CalOptima, (the Orange County Managed Health Plan), developed successful programs to reduce overprescribing of opioids to its members, prior to the mandated use of CURES.¹⁹ This resulted in fewer prescriptions for Medi-Cal recipients in Orange County than prescriptions provided to private pay/insured patients. CalOptima is using a data-driven approach to reduce the number of pills prescribed by network physicians and has been advising physicians of how their prescribing practices compare to others in the network. Their educational method has proven effective in lowering prescribing rates and dosages. CalOptima has also reduced misuse by establishing

member/prescriber agreements and monitoring pharmacists. Other health plans serving Orange County residents including Kaiser-Permanente, Cigna and the UCI Health System have established prescribing guidelines, education and procedures to reduce over-prescribing, including use of non-opioid analgesic treatments and alternative treatments such as physical therapy, acupuncture, etc. However, reimbursement rates are typically below the amount needed to cover the cost of the alternative treatments. Until physicians are able to obtain adequate reimbursement to provide alternative treatments, opioid prescriptions may remain the primary treatment for chronic pain.



HARM REDUCTION

Harm has been defined as “sickness, death, social misery, crime, violence and economic cost to all levels of government.”²⁰ Strategies to reduce the risks of drug misuse are those that can protect, as well as engage and link active consumers with treatment. When asked about desired outcomes, 34% of opioid survey respondents identified reducing harmful behaviors as a desired outcome of services. Nationally recognized opioid abuse harm reduction methods include:

- ◆ Legal protections for those reporting drug overdoses
- ◆ Use of medications to reverse overdoses
- ◆ Protections to reduce the spread of infectious and possibly deadly diseases
- ◆ Interventions to limit disease progression

While many of these strategies are in place in Orange County, policymakers, local jurisdictions, health professionals and stakeholders should explore other research-based strategies from different parts of the United States and other countries.

Objective: Overdose victims receive timely medical assistance

When a person overdoses, it is critical they receive medical care as quickly as possible to prevent death. The overdose victim is dependent on those who witness the event to call for or provide help. Survey

results indicate that approximately 43% of opioid consumers had witnessed another’s overdose. A witness must not be concerned, at that moment, about consequences to themselves that may prevent them from providing assistance.

6. Recommendation: *Health professionals, treatment providers and law enforcement should always advise persons of their legal protections for assisting at an overdose.*

California enacted Good Samaritan laws in 2013 preventing prosecution for drug possession, use, etc., of anyone responding to or reporting an overdose.²¹ This potentially life-saving law allows requesting help for an overdose victim without fear of criminal charges.

6a. *Physicians, pharmacists and treatment professionals should advise consumers, family members and the community about Good Samaritan laws when prescribing opioids and in conjunction with naloxone training and distribution.*

The law protects medical professionals, friends, family and opioid consumers. There are educational materials available through the HCA and community coalitions that advise people of what to do if they are witness to an overdose that includes information about protection under the law. This information should also be shared routinely when naloxone is provided or prescribed.

6b. *Law enforcement agencies should continue training and monitoring field services to*

ensure Good Samaritan laws are applied to everyone equitably.

Help is called more often when there is reduced fear of involvement with law enforcement. There are educational efforts in the county to ensure public knowledge of it and no concerns were expressed by stakeholders about law enforcement practices.

Objective: Prevent Overdose Deaths

The administration of naloxone reverses overdose from prescription and illicit opioids, saving a life almost immediately. It also provides an opportunity for the individual to consider and possibly enter treatment. The drug has no euphoric effects and no potential for misuse, as it only causes the recipient to experience withdrawal symptoms. Both the CDC and the National Safety Council have stated that naloxone should be readily available to medical professionals, first responders, treatment providers, families and friends, opioid consumers and community members^{22,23} just as Epipens are readily available to reverse anaphylactic shock and possible death from allergic reactions.

7. Recommendation: *All organizations eligible to administer or distribute naloxone should ensure naloxone is readily available.*

Applications are being accepted for free naloxone through the California Department of Health Care Services Opioid Response Grant: California's

MAT Expansion Project 2, a \$20 million Naloxone Distribution Project.

7a. *All first responders should be trained to administer naloxone and have it available.*

First responders by definition may be the first on scene of an overdose. Paramedics and emergency medical technicians responding to 911 calls carry naloxone. Law enforcement officers in the field may or may not carry it. A telephone survey was conducted in January 2018 with the 25 police departments in Orange County. The results indicated only six departments have field officers who carry naloxone and that does not necessarily mean all officers are trained and carry it. Six departments said they did not have it available, four were studying it and one was in process of purchasing it. Eight departments did not respond to phone and/or email messages, so it is unknown if it is available in those departments. Overdose victims have increased chances for survival when all first responders have appropriate overdose reversal medications.

7b. *EDs, jails and treatment programs should establish methods to evaluate those who may need naloxone and provide it to those determined to be at risk for overdose upon release.*

Persons released from an ED after an overdose, jail custody or residential treatment have significantly higher rates of overdose than those in the community.^{24,25} Providing naloxone to those at-risk upon release from these settings can prevent relapse

and overdose, particularly when coupled with in-reach programs and linkage to treatment upon release.

7c. *Primary care physicians should include naloxone as a standing order when prescribing opioids for both acute and chronic pain and pharmacists advise customers about the availability of naloxone in the event it is not co-prescribed.*

California physicians prescribing opioids can have a standing order for naloxone with all opioid prescriptions for both acute and chronic pain. Because most opioid prescriptions are provided in office visits, it is beneficial if physicians co-prescribe it with opioids as a matter of course. CalOptima has written a reminder to tell physicians to co-prescribe.

Pharmacies have naloxone both as an insured pharmacy benefit when prescribed and also retail without a prescription in Orange County. Two of the largest pharmacies, Ralphs and CVS, regularly stock it. However, in small random surveys of pharmacies in the county, some have indicated they charge fees to train the lay purchaser in its use, due to use of the pharmacist's time. The cost of the drug plus training may prevent some people from purchasing it. Ralph's pharmacies do not charge for training. Naloxone may also be obtained for free in the county from the Solace Foundation.

7d. *Prescribers and pharmacists should discuss the use of naloxone with caregivers and family members and provide or make available training, so caregivers have it available in the*

event of an overdose of someone in their care.

Caregivers and family members need to be educated and trained in use of naloxone. The highest numbers of accidental prescription opioid overdoses are between the ages of 45-64.²⁶ Accidental overdoses occur even among those who are taking opioids as prescribed, due to interactions with other drugs exacerbating the potential for overdose. This is particularly important for older adults who take on average five prescribed medications per day and who may not monitor their medications appropriately.²⁷ Prescribers can provide necessary information on co-prescribed naloxone through office education and even YouTube videos.

7e. *Policymakers, the HCA, health professionals and community stakeholders should support the life-saving efforts of community organizations interested in providing naloxone to opioid consumers, by seeking all funding opportunities for naloxone, including the SOR naloxone grant which has almost \$20 million available to provide naloxone to appropriate groups and organizations.*

Opioid consumers are at high risk of overdose, particularly with the increase of more potent synthetic opioids being found in heroin and pills. Research reported in the Annals of Internal Medicine concluded that, "Naloxone distribution to heroin users is likely to reduce deaths and is

cost-effective, even under markedly conservative assumptions.” Of those opioid users responding to survey questions about overdoses, almost one-third said they had overdosed (OD), and almost 43% had seen another person OD. In such circumstances, naloxone accessibility to consumers, friends and family is critical.

The Solace Foundation of Orange County is a volunteer organization that focuses on providing naloxone to active users, their family members and friends. They also train stakeholders, including school staff and treatment providers. The organization was founded by those who’ve lost loved ones to overdoses, sometimes in their homes, because others did not know how to respond, nor did they have any knowledge of naloxone or how to use it.

Solace reports well over 1,000 overdose reversals to date, primarily by partnering with the now non-operational Orange County Needle Exchange Program (OCNEP) and providing naloxone at sites frequented by opioid consumers.²⁸ In 2017, the Board of Supervisors accepted a grant of over 6,200 doses of naloxone, which has been distributed by Solace throughout the county. Solace is reporting that since the volunteer needle exchange program ended in January 2018, it has become more difficult to locate active users to provide this life-saving medication and other health products to reduce infections and disease. From December 2017, through November 2018, Solace reported 360 overdose reversals, however almost 80% occurred in the Santa Ana Civic Center and riverbed, prior to the restrictions enforced in those areas.

The Drug Enforcement Agency (DEA) reported that there were 216 findings of fentanyl in forensic testing in California in 2016.²⁹ In addition to having naloxone available, opioid users need to have the potency of drugs tested. There is increasing evidence that fentanyl is now in most of the heroin and pills sold on Orange County streets. The off-label use of fentanyl testing strips can reduce overdoses. Solace is currently providing fentanyl testing, along with naloxone and health care supplies to opioid consumers in the county. Since December 2017, Solace has detected fentanyl in almost all opioids tested, including both black tar and China White heroin, as well as in stimulants.³⁰

8. Recommendation: *The HCA, first responders, law enforcement and interested stakeholders should develop a surveillance system capable of identifying multiple overdoses within communities, through a stakeholder communication system, to enable an immediate response.*

Fentanyl and fentanyl analogs are increasingly involved in opioid overdose deaths and are now commonly found in illicit drugs purchased in Orange County. The National Heroin Task Force recommends that communities have public safety and public health rapid response strategies to address these overdose events.³¹ These strategies include developing real-time reporting and alert systems to notify law enforcement, first responders and the public when there is a sudden increase in overdoses in any community. The federal Department

of Health and Human Services developed ROAR (Rapid Opioid Alert and Response), using real-time monitoring to identify spikes in overdoses and alerts the networks that interact with heroin users in the affected area. The ROAR system pilot was initially launched in Baltimore, and Anne Arundel County, MD and is being expanded to other states. California does not currently participate. An additional tool available to states at no charge is the Overdose Detection Mapping Application Program, (ODMAP), an overdose mapping tool allowing first responders to log an overdose into a centralized database in real time.³²

Objective: Engage people in treatment upon identification of need

Individuals may be most willing to go into SUD treatment immediately after an overdose or other negative event such as incarceration. If they are assessed and linked to treatment and ancillary services before they are released, the risk of further drug misuse or overdose is reduced. A majority of the Opioid Survey respondents indicated the need for timely access to all types of treatment.

9. Recommendation: *Hospitals, stakeholder agencies and health professionals should research successful programs and seek funding opportunities to establish SUD in-reach programs in Orange County hospital EDs.*

Emergency department visits, due to opioid overdose

in Orange County, have more than doubled since 2011. In 2016 there were 2,282 ED visits, a 29% increase over 2015.³³ In 2017, there was a 10% decrease from 2016, but ED visits remain extremely high. The 2017 Orange County Health Improvement Plan set an objective to reduce ED overdose visits by five percent (5%) by 2020.³⁴ One effective approach is to provide services that prevent repeat overdoses; however, opioid consumers responding to the survey, who had been treated in an ED for an overdose, received no or very little information about treatment options upon release. A majority of the respondents (54%) stated they were given no information about treatment and 25% indicated treatment was recommended, but no further information was provided. The remainder were either admitted to the hospital (5%), given a referral to treatment (10%), given information about drug treatment programs (17%) and only 1% received any follow-up.

ED visits and hospitalizations provide a unique opportunity to engage with opioid consumers and link them to treatment. Throughout the United States, health systems and local jurisdictions are exploring or implementing in-reach or warm hand-off programs. The OD victim is assessed and provided case management prior to leaving the hospital. The individual may be referred to a nurse case manager, trained peer, recovery coach or system navigator. They approach the individual on their terms and link them to treatment before discharge if possible.³⁵ Effective case management may also include transportation, assistance to obtain housing and

employment, as well as meet medical needs.

The Addiction Policy Forum recently announced the Emergency Medicine Initiative³⁶ to develop protocols for treatment, assessment and linkage from EDs to appropriate levels of care. These programs are similar to the Orange County Triage Grant Program.³⁷ The HCA BHS and HASC developed a program at nine hospital EDs where licensed hospital triage staff provided assessment and crisis intervention to those presenting in the ED in a behavioral health crisis, to increase the opportunity for crisis stabilization and diversion from inpatient hospitalization. Triage staff also provided referrals and linkage assistance to appropriate levels of care in the community. The grant ended, but hospitals and the HCA BHS are continuing to provide staffing for certain services. This type of program can be replicated for substance use in-reach.

In-reach/case management programs are also appropriate for jails. Due to decrease in tolerance, an overdose after release from incarceration is 40 times higher than among users in the community.³⁸ There is evidence that in-custody assessment and case management prior to release can reduce relapses and overdose deaths.

10. Recommendation: *OCSD and the HCA should continue to implement the linkage component of the in-custody/post-custody services identified as a strategic priority in the Orange County 2017 Strategic Financial Plan³⁹, as funding and resources are available.*

Currently, Orange County is expanding custodial in-reach services for those with SUD. Collaborative groups comprising of County administration, public protection, the HCA and community stakeholders are in place to develop and implement programs to better serve those with SUD. These programs are primarily funded under AB 109 and Proposition 47.

Orange County administers behavioral screenings and/or assessments for all those involved in the criminal justice system, including those in custody. AB 109 offenders are screened by public defender staff and behavioral health clinicians assess behavioral health functioning, housing, employment, educational, medical and behavioral health needs. OCSD and Probation staffs also assess criminogenic risk prior to inmate release.

Under a recent Orange County Proposition 47 grant, system navigators conduct screenings in the jail to identify services and supports needed upon release from custody for misdemeanants with substance use disorders and mild-to-moderate behavioral health illness. Reentry linkages are also provided upon release from custody. Both AB 109 and Proposition 47 provide linkage to treatment services upon release and continuing case management to address needs such as housing, transportation, etc. The Proposition 47 program is funded by two \$6 million grants from the Board of State and Community Corrections, until December 2022. The HCA Correctional Health Services (CHS) and BHS are in the process of implementing the Jail to Community Re-Entry program in which clinicians, funded by the Mental Health Services Act (MHSA), will conduct thorough

needs assessments to identify reentry needs of individuals with behavioral health issues. These in-reach and post custody services are included in the Orange County 2017 Strategic Financial Plan as a strategic priority for in-custody/post-custody services.

11. Recommendation: *Community organizations should expand Outreach and Engagement Programs using the HCA BHS Outreach and Engagement and the Drug Free Anaheim Models.*

Opioid Survey respondents identified lack of knowledge regarding available treatment services as a barrier to getting help. The HCA BHS provides Outreach and Engagement services to persons with behavioral health and substance use disorders, who may be homeless, as part of the BHS Navigation and Prevention and Intervention Services. The Outreach and Engagement teams, funded by MHSA, reach out to individuals and families throughout the county experiencing the full-continuum of behavioral health conditions from mild/moderate to severe/persistent. The teams make approximately 3,000 contacts per year and use Motivational Interviewing to engage consumers and link them to behavioral health and substance misuse treatment services.

The city of Anaheim and Social Model Recovery Systems (SMRS) have partnered to provide outreach, screening and treatment referrals to homeless addicts in Anaheim. Based on other programs in the country, the consumer may drop-off drugs at the police station, or turn them over to the SMRS/ Anaheim Police Department team without fear of

arrest and receive support services and treatment referrals. Staff report they have screened almost 400 individuals and 195 have entered treatment.

Objective: Reduce spread of infectious diseases

Injection drug use and the use of shared needles increase the risk of spreading potentially deadly blood-borne diseases such as HIV and hepatitis C, as well as other infections. The risk can be reduced by the availability of clean injection supplies.

12. Recommendation: *Policymakers, health professionals and the HCA should explore the benefits of providing health care products at the SUD Engagement and Referral Center.*

The County partnered with CalOptima, Kaiser-Permanente and St. Joseph Hoag Health to purchase a facility and develop the Be Well Orange County Regional Mental Health and Wellness Campus in Orange with the intent to provide comprehensive behavioral health services on site. One of the proposed programs is a SUD Intake and Referral program. This center could also be used to provide non-medication health products such as sterile water, bleach and gauze to reduce infections and the spread of disease.

13. Recommendation: *Policymakers, health professionals, public safety agencies and community organizations should consider both costs and benefits of internationally recognized*

harm reduction models in addressing any increasing rates of infectious diseases related to injection drug use. These may include effective, safe needle exchange programs NEP.

Federal and state governments and health officials recognize that there are certain harm reduction methods that are proven to reduce the spread of infectious diseases by injection drug use. These strategies which can improve public health, including NEP, are also considered by many communities to negatively impact public safety. Reconciling these seemingly disparate issues is often difficult. The following internationally accepted harm reduction model is provided here to encourage policy discussions.

In January 2018, the Centers for Disease Control and Prevention (CDC) released a report on HIV infection and HIV-associated behaviors among injection drug users, stating that the recent opioid crisis increases the potential for HIV outbreaks among injection drug users. The report highlighted the need for risk reduction services, including Syringe Service Programs (SSP), also referred to as NEP. The goal of these programs is to reduce transmission of HIV, hepatitis C and other infections by providing access to sterile syringes and disposal, risk reduction education, health testing and treatment referrals. The California Department of Public Health recently reported that hepatitis C infections have increased 55% in young men ages 20-29, and 37% for young women 20-29 and that sharing injection equipment is the number one way hepatitis C is spread. The report

also stated that these rates can be reduced by 60% for injection drug users using NEPs and other harm reduction models.⁴⁰

NEPs are provided in California by organizations/ community groups certified by the state and where allowed by local jurisdictions/cities. The volunteer Orange County Needle Exchange Program (OCNEP), founded by UCI students, provided this service in Santa Ana until January 2018, when the city no longer allowed it. OCNEP partnered with the Solace Foundation and the Radiant Health Centers in this harm reduction effort and distributed naloxone in addition to providing clean needles and syringes, providing safe syringe disposal, health testing and referrals to physical and SUD health treatment.

Orange County does not have a high rate of HIV infection and there is a time lag between the harmful behavior resulting in contagion and diagnosis of infection. Therefore, the HCA Public Health Services (PHS) has indicated it is not possible to show whether the OCNEP program reduced the spread of HIV due to the length of time OCNEP was in operation (approximately two years) and the current medical data available. While there is a high number of hepatitis C cases in the county, currently, the data doesn't reflect accurate causation information as it is based on patient reporting. While it is not possible to show the impact of the OCNEP program on these diseases, it is possible to show the increase in opioid overdose reversals due to the partnership of Solace and OCNEP. Prior to partnering, Solace reported 12 reversals and during the partnership they reported over 1,000.

OCNEP recently received State certification to operate a mobile program in four (4) Orange County cities. Those cities and the County oppose its operation. Much of the concern is due to the exchange model OCNEP has proposed, which is one clean needle for each used needle exchanged, plus 20 needles (1:21), not to exceed 200. Other NEPs use a model of exchange of one clean needle in exchange for one used (1:1), which may be more acceptable to communities that have high concentrations of injection drug users, if supported by appropriate, monitored, syringe disposal methods. OCNEP met with community members to explore ways to ameliorate the concerns of those communities, but the issues were not resolved. There is a court injunction preventing the program's operation at the present time.



TREATMENT

Treatment outcomes for substance use disorders have been studied over the years leading to an evolution in the type and levels of services provided to best meet consumer needs. For decades addiction was considered a character disorder rather than a disease. As such, treatment for substance use disorders (SUD) has been based upon a social model which emphasizes peer support, group participation and 12-step support systems. While these approaches are still valuable, additional strategies are now available.

It is now recognized that SUD is a chronic, treatable disease involving changes in brain chemistry. With the additional knowledge, a chronic disease care model has been gaining acceptance in the field, including the use of medications in conjunction with behavioral health services. Research indicates that the effectiveness of treatment is based on many factors and treatment should begin with a diagnosis of a substance use disorder and a psychosocial assessment by licensed clinicians to ensure services are appropriate. The majority of survey respondents indicated more services are needed in every type and level of treatment.

Objective: Increase access to evidence-based Medication Assisted Treatment (MAT)

MAT is an effective treatment for opioid use disorder. The medications reduce cravings and block opioids from reaching the receptors in the brain.

The American Association for the Treatment of Opioid Dependence reported research that its use supports abstinence, particularly when medication is provided in conjunction with evidence based behavioral health practices (EBPs), such as cognitive behavioral therapy (CBT), trauma informed services and motivational interviewing in any treatment modality.⁴¹ Medications, which may be full or partial opioid agonists, (methadone and buprenorphine, respectively), or opioid antagonists such as naltrexone, are most effective when provided long term, at least three months, and may be taken for many years with only positive effect.^{42,43,44} Financial, programmatic and stigma issues are considerations that continue to limit the use of MAT in the medical, institutional and the SUD treatment community.

14. Recommendation: The HCA, health plans and stakeholders should collaborate to develop a MAT educational anti-stigma campaign, to increase access to services.

There are many treatment providers and support groups that define recovery as total abstinence. This perception fails to recognize that medications can help people refrain from using more dangerous drugs and to be functional members of the community. Almost 30% of Consumer survey respondents identified medications to support recovery as a needed service, but 59% said they had never had MAT. Among treatment providers, almost 40% stated that they do not permit any MAT for consumers in their programs and 10% of all respondents indicated they are opposed to its use. A MAT educational anti-

stigma campaign could help alleviate concerns that still limit its use.

15. Recommendation: *All treatment and health professionals, regardless of the type of treatment or setting, should provide or link consumers to MAT, when clinically indicated.*

The most commonly prescribed medication for Opioid Use Disorders (OUDs) is methadone, which is provided in Narcotic Treatment/Opioid Treatment Programs (NTP/OTP). NTP/OTPs operate under strict regulatory controls of federal and state governments. In Orange County, there are two NTP/OTP providers offering methadone and counseling at four locations. These facilities are located in Santa Ana, Fullerton, Costa Mesa and Stanton and the programs can serve 1,100 adults at any given time. Three programs currently qualify for Drug Medi-Cal (DMC) reimbursement and are required to also offer buprenorphine and naloxone.

Primary care physicians and psychiatrists may prescribe and administer medications, including naltrexone (oral and long lasting injectable), and buprenorphine. There are over 300 buprenorphine certified doctors in Orange County. The President's Commission has recommended that all FQHCs be mandated to have MAT certified physicians on staff.⁴⁵ Korean Community Services is an FQHC look alike and does offer MAT as a Medi-Cal billable service. The certified physicians in CalOptima's provider network can provide buprenorphine to their patients and have been exploring methods with the HCA to increase MAT services for its members.

15a. *HASC, the HCA and health insurers should collaborate to identify funding and begin MAT induction in EDs and hospitals. This should be coupled with harm reduction strategies of in-reach and case management to link patients to continuing services upon release.*

There are no EDs in Orange County known to provide MAT prior to the patient's release after an opioid overdose.⁴⁶ There are hospitals in other areas that have implemented this practice to help patients engage in treatment upon release. Highland Hospital in Oakland, CA is participating in an ED-BRIDGE program to provide buprenorphine prior to release and link patients to continuing treatment. Dr. Andrew Herring, who runs the program, is quoted as saying, "With a single E.R. visit we can provide 24 to 48-hours of withdrawal suppression, as well as suppression of cravings...it shows them there's a pathway back to feeling normal."⁴⁷

15b. *MAT should be offered to inmates as part of treatment in the proposed in-custody treatment program, identified as a priority in the County's 2017 Strategic Financial Plan, with linkage to continuing treatment upon release.*

There are correctional facilities throughout the country providing in-custody MAT Services, including the Rhode Island Department of Corrections (RIDOC), which reported a 61% decrease in ODs after release. RIDOC also reported that 76% of detainees on MAT continue treatment post-release.⁴⁸ Currently,

Vivitrol is provided by the HCA Correctional Health Services (CHS) to AB 109 offenders and probationers one week prior to release when they are linked to community services. Buprenorphine or methadone is provided to pregnant women for the term of their pregnancy or incarceration. The HCA CHS, BHS, OCSD and other stakeholders, are currently evaluating protocols for expanding the use of MAT in County jails. Most of the CHS physicians are now certified to provide MAT. In addition, they have developed a MAT training geared toward criminal justice and law enforcement professionals. One concern is ensuring the availability of MAT providers in the community to continue services upon release.

16. Recommendation: *The HCA and NTP/OTP should partner to establish the proposed NTP/OTP in south county.*

At the present time Orange County NTP/OTP facilities are located in the central region of the county. A requirement of the DMC-ODS contract is that treatment locations are geographically accessible and travel time should be less than 30 minutes. This has proved difficult for south county NTP/OTP participants. One of the current providers has identified an appropriate location to better serve residents in the southern area of the county. This will improve access to timely treatment by reducing transportation time which is a challenge to those seeking treatment.

Objective: *Provide timely access to an affordable continuum of care*

It is recognized that an accessible continuum of care must be available ranging from early intervention to recovery supports, with treatment on demand as an overarching goal. In Orange County, there are over 600 state licensed and/or certified private and publicly funded SUD treatment providers. However, accessing programs often proves difficult, primarily because of the cost/lack of health insurance, as was noted by survey respondents.

17. Recommendation: *The HCA should use available funding sources to maintain and expand publicly funded services, including continuing the DMC-ODS contract with DHCS to ensure a revenue source for expanded services.*

Drug Medi-Cal (DMC) is one of the most important funding opportunities available to better meet client needs under the California DMC-Organized Delivery System (DMC-ODS). Orange County entered into a DMC-ODS agreement with the DCHS July 1, 2018. DMC provides a funding source to pay for increased residential treatment, MAT, Case Management and Recovery Supports. This revenue source, in conjunction with block grant and realignment dollars, is vital to services.

18. Recommendation: *All privately operated and publicly funded programs should provide or make available affordable and easily accessible services*

in all treatment modalities and levels of care, to meet consumer needs.

Opioid Survey respondents identified additional services in all modalities as a critical need. Access to services is often limited by payers and the continuing disparity in coverage by insurers. Parity should be provided and all payers and health plans should offer a continuum of care. As a DMC-ODS county, the HCA provides or makes available via contracts, publicly funded services in the following modalities: Outpatient Drug Free treatment, Intensive Outpatient, Medically Monitored Inpatient Withdrawal Management (detox), Residential Detox, Adult and Adolescent Residential Treatment and the criminal justice population is linked to MAT including methadone and Vivitrol (long acting injectable Naltrexone). Generally, there is no wait to enter outpatient treatment. Each of the programs uses evidence-based practices for individual and group counseling, family therapy, consumer education and crisis intervention. Case management is offered within the programs to coordinate care with medical providers and link consumers to needed ancillary services, as well as to transition clients to different levels of care or discharge to recovery support services.

18a. *The HCA BHS should recruit additional residential treatment providers for underserved populations. Residential programs that are DMC certified may contract with the County to provide these services.*

Often people request residential treatment not because of a need for that type and level of care but because they need safe housing. This has resulted in long waiting lists for residential care. Under DMC-ODS, individuals are screened for the most appropriate type and level of care and only go to publicly funded residential treatment if diagnosed with a SUD and assessed to need that level of care. However, Orange County still doesn't have enough affordable beds to serve those in need, particularly women. Under DMC-ODS, the regulation that limited the number of beds allowed in residential facilities has been waived. This may attract additional providers, who previously could not participate, due to the limited bed number requirement.

The HCA's contract recruiting and incentivizing efforts are needed with additional non-profit and for-profit providers to become DMC certified and contract with the County. Providers are needed to better serve women with children, families and those with a co-occurring mental health disorder. The DMC reimbursement rates are now considerably higher than previous state rates and multiple services can be billed daily. Under contract with the County they may fill beds that would be left empty and maintain a revenue stream. This may incentivize more providers to participate in DMC. In addition, Mental Health Services Act funding can also be used to support services in a specialized co-occurring residential treatment program, as proposed in the planned Anita Drive facility, which will offer co-occurring services.

18b. *The OCSD, policymakers, the HCA CHS and*

treatment providers should partner to implement the County's proposed in-custody SUD treatment program.

SUD treatment is provided in prisons and jails in other parts of the country. These programs have proved successful in engaging inmates in treatment prior to release back into the community.⁴⁹ These programs are offered by the Federal Bureau of Prisons and in the Allegheny County Jail, Rikers Island, and Kentucky and Rhode Island correctional facilities.^{50,51,52,53,54} Orange County's 2017 Strategic Financial Plan includes a priority to develop an in-custody SUD treatment program.⁵⁵ CHS has created a multidisciplinary SUD workgroup to review and revise the current program, including enhanced intake screening to identify those at risk of SUD. This will improve treatment retention, support sobriety and improve family and community reintegration, upon release from the jails.

18c. *Policymakers, criminal justice, the HCA and stakeholders should research diversion programs in other locales for possible ways of expanding Orange County programs as funding is available.*

Orange County has collaborative court programs, including Drug and DUI courts, and specialized programs through the District Attorney's office to divert individuals from incarceration after entering a plea. Those completing the programs are able to get their cases dropped. In Buffalo, NY, a specialized opioid court was the first in the area and was followed by the Bronx City Court and Suffolk County

Court.⁵⁶ There are also multiple jurisdictions such as Rhode Island and Monroe County, NY in which pre-plea diversion programs are offered as well as post-plea.⁵⁷ This approach can be time and cost saving for the court system.

19. Recommendation: *The HCA should continually evaluate promising treatment practices from other areas of the country to determine benefits to Orange County.*

Throughout the country programs are being considered, evaluated and implemented to improve SUD services in their communities. By evaluating whether they are applicable to Orange County, improvements to services do not need to be created in a vacuum, but rather benefit from the efforts of others.

19a. *The HCA and treatment providers should explore the use of telemedicine to determine any benefits for use in SUD programs.*

Telemedicine is being used in other locales to ensure people have access to services. Bright Heart Health is a private provider offering outpatient services, including groups, throughout the country using telemedicine.⁵⁸ Telemedicine services might be useful to provide some MAT evaluation services in EDs, jails or other settings.

19b. *The HCA and the Social Services Agency should evaluate benefits of family-based programs in Orange County and, if appropriate, apply for funding as it becomes available.*

Family-centered treatment programs involve the entire family as the consumer of services. Children and Family Futures, an Orange County based non-profit, has long promoted this level of care to provide a comprehensive, family-centered approach ensuring the health and safety of children and adults. The Department of Health and Human Services is going to award states \$20 million to develop, enhance and evaluate family-based treatment programs.⁵⁹ These programs could be eligible for future funding under the Family First Prevention Services Act and would improve the health and quality of life for families in the county.



RECOVERY SUPPORTS

Recovery support services focus on the developing strengths and skills that underpin the ability for someone to remain in, or to re-enter the community as a participating member. They address the broad range of societal needs including: having a safe place to live, contributing to one's own and their family's support and feeling connected to family and community.

Objective: Individuals are able to self-manage their health and their recovery

Recovering addicts often face many challenges maintaining sobriety. They need a safe environment in which to live, free from triggers that can cause a relapse. They may also need linkage to ancillary services such as life skills training, educational, pre-vocational and vocational assistance, family support services, benefits assistance, health care and transportation; advocacy may also be needed with other systems including criminal justice and social services agencies.

20. Recommendation: *The HCA BHS should expand the populations able to utilize certified, well managed sober recovery residences while in treatment and increase the number of contracted, certified recovery residences, including those for families, as funding becomes available.*

The HCA BHS contracts with six recovery residences

for AB 109 and probationers who are actively participating in outpatient treatment or the Probation Department Day Reporting Center Program. These homes meet the certification guidelines established by the OCSD in conjunction with the HCA BHS. The length of stay is up to four months, unless the HCA BHS approves an extension. Funding for additional certified recovery residences would allow more individuals in treatment to have a safe environment.

21. Recommendation: *Policymakers should encourage legislators and DHCS to establish and/or enforce uniform guidelines for both independently operated and program associated residential recovery homes.*

Private, for-profit providers in Orange County may also offer sober living homes to their consumers. It is not known how many comply with certification standards such as those developed by the National Alliance for Recovery Residences⁶⁰, and substandard, unscrupulous providers are still a problem in Orange County, as in many parts of the country. Mandated guidelines could resolve many of the current issues.

22. Recommendation: *Colleges and universities in Orange County should review the current peer support programs on their campuses and evaluate the benefits of developing a Collegiate Recovery Program for young adults in recovery.*

Collegiate Recovery Programs (CRP) offer a variety of support services at colleges throughout the country. The Association of Recovery in Higher Education

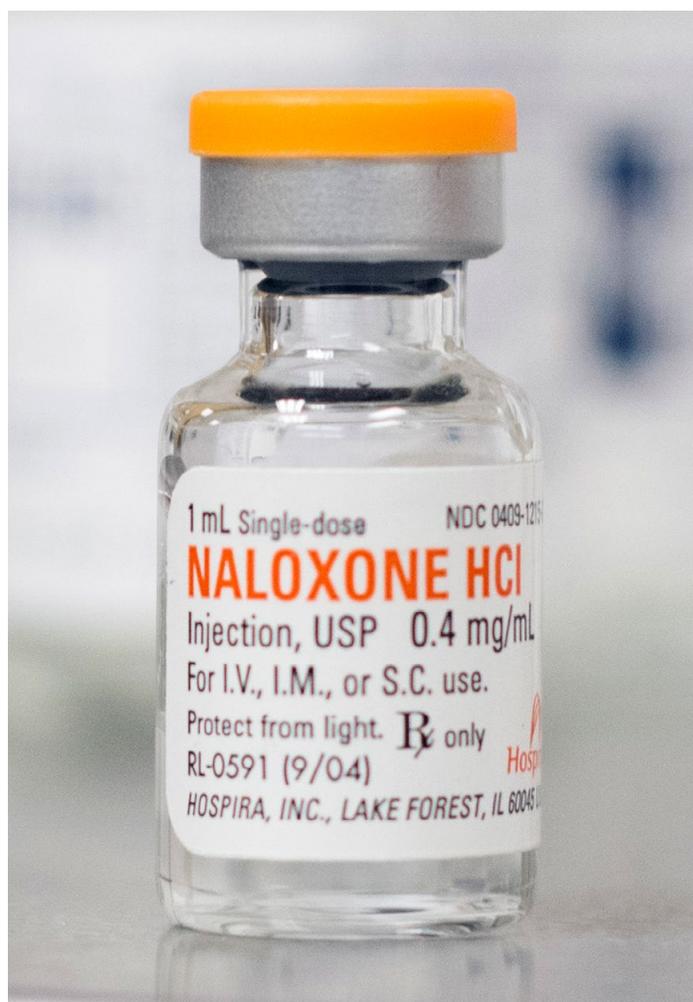
(ARHE) represents these programs and offers support to the colleges and students.⁶¹ Some CRPs offer peer support groups, socialization, etc., and others also offer sober living environments for those young adults in recovery. There are colleges in Los Angeles county offering these programs with sober living, including California State University at Long Beach,⁶² but there are none known in Orange County. Young adult college students in recovery could benefit from these programs.

23. Recommendation: *Programs providing non-clinical recovery support services should develop and maintain relationships with programs and services to ensure appropriate referrals and linkages to ancillary services including educational and vocational assistance, family support, transportation, socialization and advocacy with other agencies serving the same populations.*

SUD treatment programs have usually offered alumni and support groups for graduates. The DMC-ODS provides funding to support expanded recovery support services for all publicly-funded programs. All County-Operated and contracted programs are responsible for offering the DMC-ODS recovery support model, including recovery coaching, any needed outpatient counseling, peer support, linkages to necessary ancillary services and socialization activities. This is a new requirement for the providers and programs may still be developing.

Peer support has always been a key component of recovery. There are many 12-step and secular

support groups available to adolescents and adults in the county. There are also non-profit organizations for those in recovery such as The Phoenix Multisport which provides sports and peer-led fitness programs, and RAT Park, which offers recreational and family programs for those in the recovery community. The Orange County Re-Entry Program (OCREP) is a collaborative of over 160 member organizations “... dedicated to reducing recidivism in Orange County...” The post-custody linkages they offer include resource fairs linking the individual to employers. Those with SUD, benefit from this service offering the opportunity to obtain employment.



Conclusion

Addiction is preventable. It is also a treatable chronic disease and with appropriate treatment and support, people can manage their disease and live full lives in recovery. They are able to rebuild the family and personal relationships they may have lost, as well as become contributing community members.

The Alcohol and Drug Advisory Board partnered with Orange County stakeholders and the HCA BHS to examine ways of mitigating the opioid crisis affecting individuals, families and communities in the county. It is evident that stakeholder partnerships and the use of evidence-based practices can be effective in

closing gaps in services, as well as expanding and enhancing current evidence-based practices.

If all Orange County stakeholders unite to adopt an evidenced-based public health approach, we can effectively address the opioid crisis impacting this county. This will not only prevent the onset and intervene in the progression of the disease; it will increase the numbers of those in recovery and will prevent the spread of related infectious diseases and accidental death. The quality of life for all Orange County residents will only be improved through these efforts.



References

- ¹ Macy, B. (2018). *Dopesick: Dealers, doctors and the drug company that addicted America*. Boston, MA: Little, Brown and Company.
- ² Hedegaard H., Minino A.M., Warner M (2018). Drug overdose deaths in the United States, 1999-2017. *NCHS Data Brief, no 329*. Hyattsville, MD: National Center for Health Statistics.
- ³ Orange County Health Care Agency and Orange County Sheriff-Coroner Department. (2017). *Opioid Overdose and Death in Orange County*. Santa Ana, CA. Author. Retrieved from <http://www.ochealthinfo.com/civicax/filebank/blobdownload.aspx?BlobID=67355>
- ⁴ Substance Abuse and Mental Health Services Administration. (2017). Models of prevention. Center for the Application of Prevention Technologies. Washington, DC: Institute of Health Information.
- ⁵ Department of Health and Human Services. (2016). *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health*. Washington, DC: Health and Human Services. Retrieved from <https://addiction.surgeongeneral.gov>
- ⁶ CA Department of Health Care Services. (2018). *State response to opioid crisis grant*. Retrieved September, 2018 from <https://www.dhcs.ca.gov/.../State-Targeted-Response-to-Opioid-Crisis-Grant>
- ^{7,8} Substance Abuse and Mental Health Services Administration. (2017). *Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17-5044, NSDUH Series H-52)*. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved August, 2018 from <https://www.samhsa.gov/gov/data>
- ⁹ Orange County Health Care Agency. (2018). Health information. Retrieved from <https://www.ochealthinfo.com/prevention>
- ¹⁰ Health and Human Services. (2016). *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health*. Washington, DC: Health and Human Services. Retrieved from <https://addiction.surgeongeneral.gov>
- ¹¹ CA Department of Health Care Services. (2018). *State response to opioid crisis grant*. Retrieved September, 2018 from <https://www.dhcs.ca.gov/.../State-Targeted-Response-to-Opioid-Crisis-Grant>
- ¹² Henry-Edwards, S., Humeniuk, R., Ali, R., Monteiro, M., & Poznyak, V. (2015). *Brief intervention for substance use: A manual for use in primary care*. (Draft Version 1.1 for Field Testing).
- ¹³ National Institute of Drug Abuse. (2018). Screening, assessment and drug testing resources. Retrieved August, 2018 from <https://www.drugabuse.gov/nidamed-medical-health-professionals/tool-resources-your-practice/screening-assessment-drug-testing-resources/chart-evidence-based-screening-tools>

- ¹⁴ The President’s Commission. (2017). *Report on combating drug addiction and the opioid crisis*. Washington, DC: Author.
- ¹⁵ Turn the Tide. On-line organization information. Retrieved November, 2018 from <https://turnthetiderx.org>
- ¹⁶ Addiction Policy Institute. (2018). *Prevention initiative*. Retrieved from <https://www.addictionpolicy.org/jpreventioninitiative>
- ¹⁷ National Institutes of Health. (2017). *Use of non-opioid analgesics for chronic pain*. Retrieved March, 2017 from <https://www.drugabuse.gov/drugs-abuse/opioids>
- ¹⁸ Dowell, D., Haegerich, T.M., Chou, R.(2016). Guidelines for opioid prescribing: CDC guideline for prescribing opioids for chronic pain - United States, 2016. *CDC Morbidity and Mortality Weekly Report (MMWR) Recommend Rep. 2016;65(1):1-49*.
- ¹⁹ Bock, R., MD. (2017). CalOptima opioid reduction program, presentation February 15, 2017; *Opioid utilization interventions*, presentation August, 2017.
- ²⁰ Addiction Information Organization. (n.d.) Harm reduction history and definitions. Retrieved February, 2017 from <https://www.addictioninfo.org/articles/256/1/Harm-Reduction-History-and-Definitions>
- ²¹ Westlaw. (2013). 2013 California Assembly Bill, 472, Chapter 338.
- ²² Centers for Disease Control. (2015). *Opioid overdose prevention programs providing naloxone to laypersons — United States. CDC Morbidity and Mortality Weekly Report (MMWR) 2014, June 19,2015 / 64(23);631-635*.
- ²³ National Safety Council. (2016). *Prescription nation 2016, Addressing America’s drug epidemic*. Washington, DC: Author.
- ²⁴ Binswanger I, Nowels C, Corsi K, Glanz J, Long J, Booth R, Steiner J. (2014). Return to drug use and overdose after release from prison. Retrieved November, 2018 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3414824>
- ²⁵ National Institutes of Health (2018). *New opioid treatment resources for emergency department clinicians*. Retrieved December, 2018 from <https://www.drugabuse.gov/news-events/news-releases/2018/10/new-opioid-treatment-resources-emergency-department-clinicians>
- ²⁶ OC Health Care Agency and Orange County Sheriff-Coroner Department. (2017) *Opioid Overdose and Death in Orange County*. Santa Ana, CA.: Author Retrieved from <http://www.ochealthinfo.com/civicax/filebank/blobdload.aspx?BlobID=67355>
- ²⁷ American Association of Retired People. (2018). On-line prescription information. Retrieved January, 2018 from https://assets.aarp.org/rgcenter/health/rx_midlife_plus.pdf
- ²⁸ Dunkle, A. (2018). Solace Foundation, founder interviews, February 2018, October 2018.
- ²⁹ Drug Enforcement Agency (U) (2016). *National heroin threat assessment summary - updated*. DEA-DCT-DIR-031-16. June, 2016.

- ³⁰ Dunkle, A. (2018). Solace Foundation, founder interview, February 2018, October 2018.
- ³¹ National Heroin Task Force (2015). *Final report and recommendations*. Retrieved from <https://www.justice.gov/file/822231/download>
- ³² Health and Human Services. (2017). *HHS Rapid Opioid Alert and Response*. Retrieved December, 2018 from <https://www.hhs.gov/idealab/2017/06/20/rapid-opioid-alert-response-roar-a-new-tool-to-address-the-opioid-epidemic-in-local-communities>
- ³³ CA Department of Public Health. *California Opioid Overdose Surveillance Dashboard*. Retrieved from <https://discovery.cdph.ca.gov/CDIC/ODdash>
- ³⁴ Orange County Health Improvement Plan, 2017-2020 . Retrieved from <http://www.ochealthiertogether.org>
- ³⁵ Providence Health Care System. *Emergency Department Mental health & Addiction Review, October 2014*. Providence Healthcare. Vancouver, Canada: Author. Retrieved from www.cpbj.com/article/20170817CPBJ01/170819847
- ³⁶ Addiction Policy Forum. *Emergency medicine Initiative, hospital toolkit, resources, tools and best practices for emergency departments to address addiction*. Retrieved October, 2018 from <https://www.addictionpolicy.org/hospitaltoolkit>
- ³⁷ Westlaw. *SB 82 Investment in Mental Health & Wellness Act*.
- ³⁸ Addiction Policy Organization. *No missed opportunities. Criminal justice interventions in our national response to addiction*. Retrieved October 4, 2018 from <https://addictionpolicy.org/blog/no-missed-opportunities>
- ³⁹ Orange County. (2017) *Orange County 2017 Strategic Financial Plan*. Retrieved November, 2018 from <http://www.bos.ocgov.com/finance/SFP2017>
- ⁴⁰ California Department of Public Health.(2018). *Laying the foundation for getting to zero*. Retrieved November, 2018 from <https://www.cdph.ca.gov/Programs/OPA/Pages/NR17-054.aspx>
- ⁴¹ American Association for the Treatment of Opioid Dependence. (2014). Article. CMS/SAMHSA/CDC/NIH-NIDA/NIH-NIAAA/Bulletin/July, 2014.
- ⁴² The President’s Commission (2017). *Report on combating drug addiction and the opioid crisis, November 1, 2017*. Washington, DC: Author.
- ⁴³ National Institute of Drug Abuse, (2012; 2009). *Medication assisted treatment*. Retrieved from www.drugabuse.gov
- ⁴⁴ Canadian Journal of Psychiatry. (2006). Evidence-Based Treatment of Opioid-Dependent Patients; *Can J. Psychiatry* 2006; 51:635-646.
- ⁴⁵ The President’s Commission. (2017). *Report on combating drug addiction and the opioid crisis, November 1, 2017*. Washington, DC: Author.
- ⁴⁶ Chakravarthy, B., M.D. Interview, October 2018.
- ⁴⁷ Goodnough, A. (2018, October 27) This E.R. treats opioid addiction on demand. That’s very rare. *New York Times*.
- ⁴⁸ California Health Care Foundation.(2018). *Report*

- on Rhode Island Department of Corrections.
Retrieved, November, 2018 from <https://www.chcf.org/wpcontent/uploads/2018/05/WebinarClosingLoopMATCorrections05092018.pdf>
- ⁴⁹ American Association of Addiction Professionals (2015). *Criminal justice system and SUD treatment policy*. Retrieved October, 2018 from <http://www.aaap.org/wp-content/uploads/2015/06/AAAP-FINAL-Criminal-Justice-System-and-SUD-Treatment-Policy-for-merge.pdf>
- ⁵⁰ American Psychological Association. (2004, March 23) Inmate Drug Abuse Treatment Slows Prison's Revolving Door. *APA Reports*. Retrieved November, 2018 from <https://www.apa.org/research/action/aftercare.aspx>
- ⁵¹ National Institute of Justice. (n.d.) *Corrections and Reentry, Inmate Programs and Treatment*. Retrieved December, 2018 from <https://www.crimesolutions.gov/TopicDetails.aspx?ID=31>
- ⁵² Bureau of Prisons. (n.d.) Research materials. Retrieved November, 2018 from https://www.bop.gov/inmates/custody_and_care/substance_abuse_treatment.jsp
- ⁵³ Willison, J., Buck, S., Bieler, G. , & KiDeuk, K. (2014). *Evaluation of the Allegheny County jail collaborative reentry programs*. Washington, D.C.: Urban Institute.
- ⁵⁴ Harland, A., M.S. (2017) *Ohio Residential Substance Abuse Treatment Programs, 2014-2015*. Office of Criminal Justice Services. Retrieved November, 2018 from <https://www.publicsafety.ohio.gov/links/RSAT2014-2015Report.pdf>
- ⁵⁵ County of Orange. (2017). *2017 Strategic financial plan. Strategic priorities*. Retrieved November, 2018. from <http://www.bos.ocgov.com/finance/SFP2017>
- ⁵⁶ The New York Law Journal. (2018) Specialized opioid courts. Retrieved October, 2018 from <https://www.law.com/newyorklawjournal/2018/08/13>
- ⁵⁷ The Center for Health and Justice at TASC (2013). *No Entry: A National Survey of Criminal Justice Diversion Programs and Initiatives*. Chicago: Author.
- ⁵⁸ Bright Heart Health. (n.d.) Program information. Retrieved from www.brighthousehealth.com
- ⁵⁹ CA Department of Health Care Services. (2018). *State opioid response grants fact sheet*. Retrieved from <https://www.dhcs.ca.gov/.../State-Targeted-Response-to-Opioid-Crisis-Grant>
- ⁶⁰ National Alliance for Recovery Residences. (2017). On-line information about NARR. Retrieved September, 2017 from <https://www.narronline.org>
- ^{61, 62} The Association of Recovery in Higher Education (ARHE) (2018). On-line Information: Directory of college recovery programs. Retrieved October, 2018 from <https://www.collegiaterecovery.org>

