San Diego Death Diaries



Roneet Lev, MD FACEP



Prescription Drug Abuse

1 The Epidemic

4

How We Got Here

San Diego Death Diaries

Best Practices

The Epidemic



 Epidemic caused by the healthcare system

9.4 million Americans on long term pain medication

Aaron Rubin

1982 -

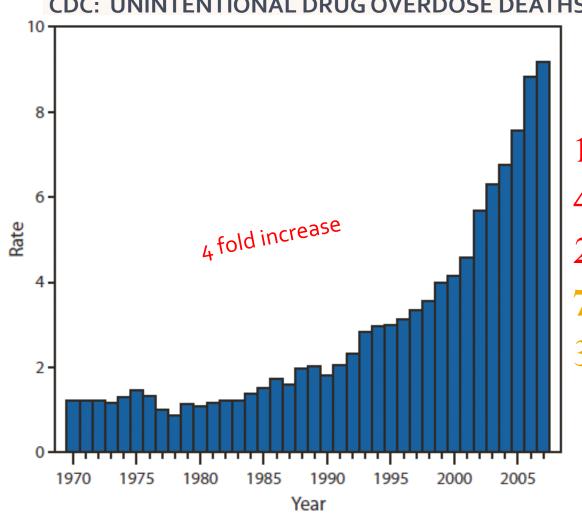
Oxycodone Overdose2005, age 23





US Deaths

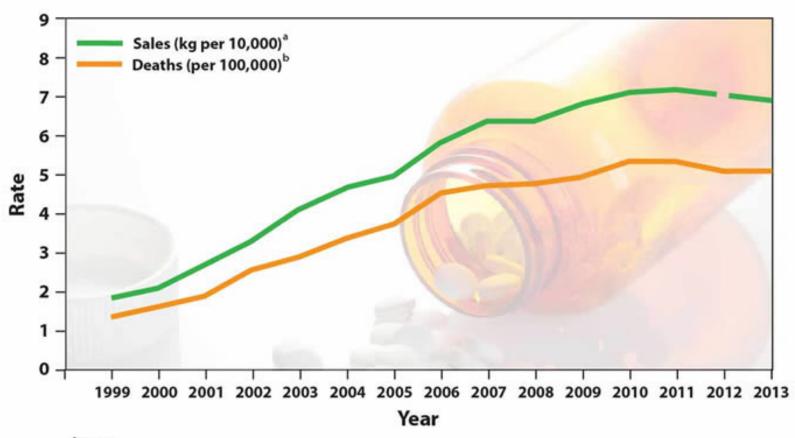
CDC: UNINTENTIONAL DRUG OVERDOSE DEATHS



105 /day from Drugs 44/day opioid 22,767 in 2013 70% opioid 30% benzodiazepine

Rates of Opioid Sales, Deaths, Addiction Treatment (1999-2013)

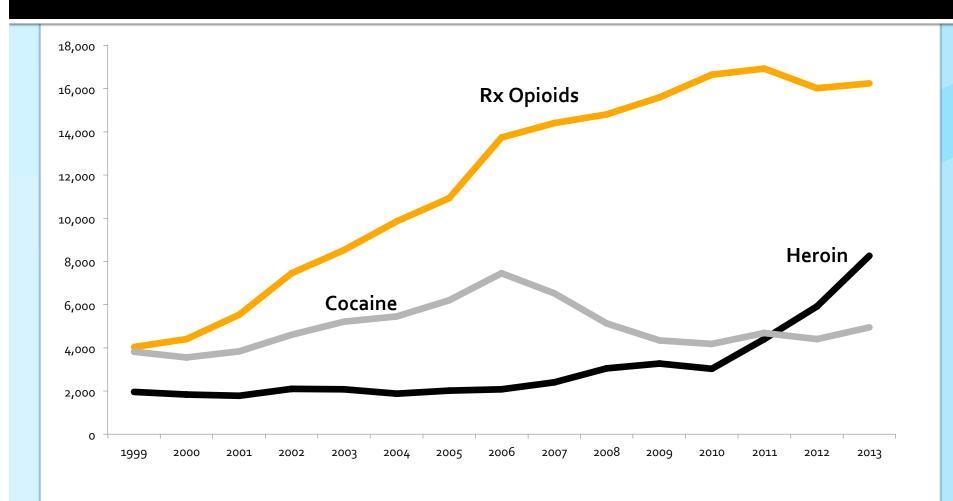
Prescription Painkiller Sales and Deaths



Sources:

^aAutomation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 2012 data not available. ^bCenters for Disease Control and Prevention. National Vital Statistics System mortality data. (2015) Available from URL: http://www.cdc.gov/nchs/deaths.htm.

US Drug Related Deaths



CDC, National Center for Health Statistics, National Vital Statistics System

United States Opioid Facts

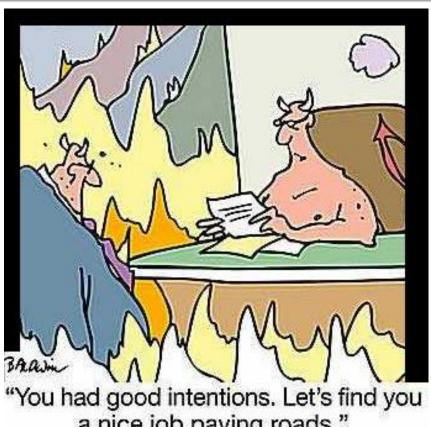
According to the American Society of Interventional Pain Physicians:

- US has 4.6% of the world population.
- US has 80% of opioid supply.
- US has 99% of hydrocodone supply.
- US has 2/3's of world's illegal drugs.



How We Got Here

- 1997 Senate Bill 402 The Pain Patient's Bill of Rights
- 1999 Pain 5th Vital Sign
- 2001 Clinton Administration: Decade Pain Control and Research
- 2005 California Pain Management Standards
- Patient Satisfaction Surveys



a nice job paving roads."

The Dark Truth behind Pain as a 5th Vital Sign

Wall Street Journal article December 2012: "A PAIN CHAMPION HAS SECOND THOUGHTS"

Dr. Russell Portenoy

- Pain Specialist NY
- •Journal Reference: *Pain* 1986;25(2):171
- •Review of 38 patients concluded: "Opioid medications can be safely and effectively prescribed to selected patients with relatively little risk of producing the maladaptive behaviors which define opioid abuse"
- Less than 1% risk addiction
- Director American Pain Foundation
- Advocate pain as 5th Vital Sign
- \$\$\$\$\$\$ from multiple opioid manufacturers



The Dark Truth behind Patient Satisfaction Surveys

THE COST OF SATISFACTION – A NATIONAL STUDY OF PATIENT SATISFACTION, HEALTH UTILIZATION, EXPENDITURES, AND MORTALITY

Fenton et al. Arch Intern Med 2012:172(5): 405-411

- 51,946 patients from 2000 2007, National Expenditure Study
- Lower Emergency Department admissions
- Higher inpatient admissions
- Higher total expenditures, 8.8%
- Higher medication expenditures, 9.1%
- Higher mortality

INVOLVING PATIENTS IN DECISIONS RAISES CARE COSTS?

JAMA Internal Medicine, May 28, 2013

- 51,946 patients from 2000 2007, National Expenditure Study
- 22,000 patients, University of Chicago, 2003 2011
- \$865 increase per patient
- 35 million hospitalizations = \$8.7 billion added cost

Changing Education

- Pain Scale/ Functional Pain
 - Don't need to get to zero
- Encouragement of medications
 - Give medications in waiting room before examination
- Methadone
 - Give or don't give?
- Tramadol
 - Misinformation
- Lawsuits
 - Over -prescribe or under prescribe



Death Statistics

Death is a Fact.

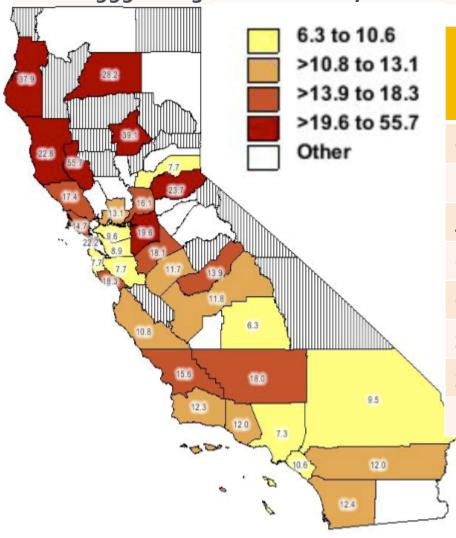
Everything Else is Conjecture.



William Farr 1807 - 1883

California Drug Induced Deaths

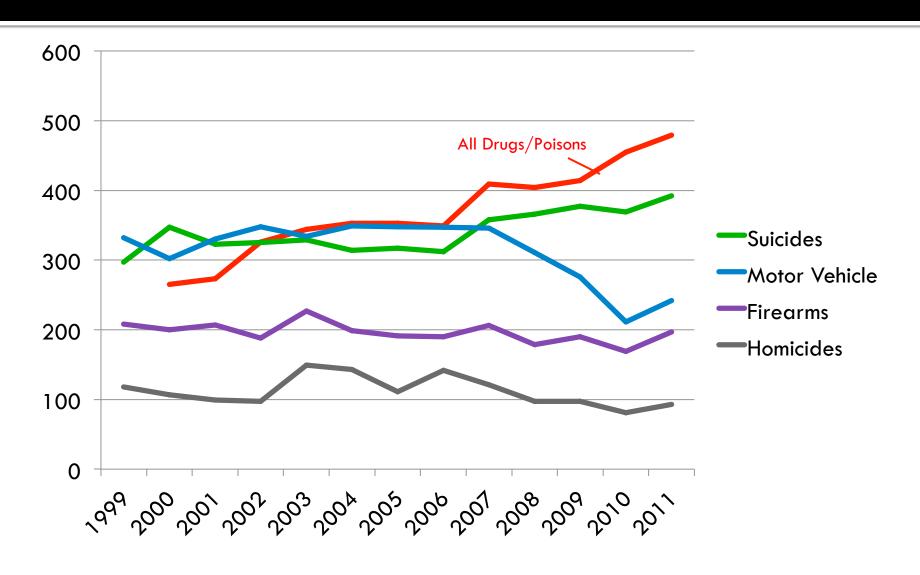
1999 - 2013 RATE PER 100,000 PEOPLE



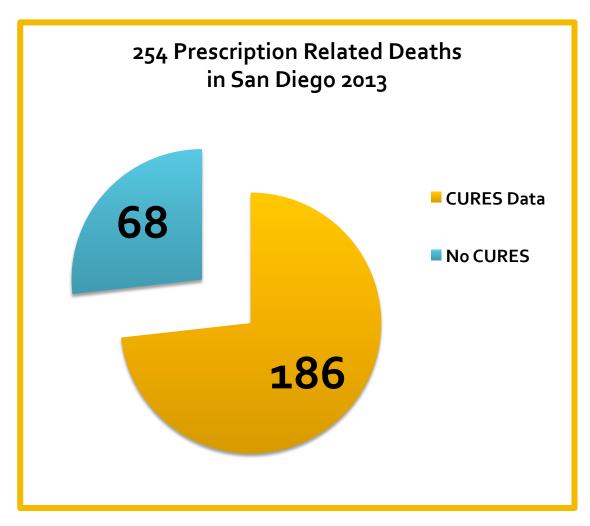
Location	Deaths/ 100,000	% of Total Deaths	Total Death s
California	12.4	100%	4747
Los Angeles	8.4	17.8%	846
Alameda	11.3	3.8%	179
Contra Costa	13.4	3.1%	147
Orange	10.6	7.5 %	318
San Diego	14.1	9.5%	452
Sacramento	17.7	5.5%	259
Riverside	14.8	7.1%	339

National Center for Health Statistics www.wonder.cdc.gov

San Diego Non-Natural Deaths



San Diego Rx Death Data



ME Data

- 254 deaths with prescriptions as cause of death
- Could be with alcohol, illicit, over the counter
- CURES Data (aka PDMP)
 - Outpatient pharmacies
 - Does Not Include
 - VA
 - Balboa Naval Hospital
 - Methadone Clinics
 - Inpatient hospitals

Medical Examiner Data

Prescription	154
Prescription + Illicit	44
Prescription + Alcohol	39
Prescription + Illicit + Alcohol	10
Prescription + Over the Counter (OTC)	4
Prescription + Alcohol + OTC	2
Prescription + Illicit + OTC	1
Prescription + Illicit + Alcohol + OTC	1
Total	254

Death Diary: 49 year old female "Compliant"

12 Rx – 1 Psychiatrist – 1 Pharmacy

September Clonazepam 1mg #45, 45

October Clonazepam 1mg - #30, 45, 90

November Clonazepam 1mg - #90

December Clonazepam 1 mg - #15,90

January Clonzepam1 mg - #120

February Clonazepam - #120

March Clonazepam - #30, 120

Autopsy: Oxycodone

Death Diary: 59 year old male "Holy Trinity"

75 Rx – 1 Psychiatrist – 3 Primary Care – 1 Pain

September Hydrocodone, Soma Hydromorphone, Ambien

October Clonazpam, Soma, Hydromorphone, Ambien,

Hydrocodone, Soma, Clonazepam

November Hydromorphone, Hydrocodone, Soma, Clonazepam,

Hydromorphone

December Hydrocodone, Hydrocodone, Soma, Clonazepam,

Hydromorphone, Ambien

January Hydrocodone, Soma, Clonazepam, Hydromorphone 4 mg,

Ambien

.

August Hydrocodone, Soma, Clonazepam, Morphine 6o mg,

Ambien

Autopsy: Morphine, Ambien, Sertraline, Hydroxyzine

Death Diary: 56 Year Old Female "Start n methadone, End on Methadone"

23 Scripts
10 Providers

June

February, March No Meds

April ER#1: Hydrocodone #10

Dr. R: Codeine#40, Lorazepam #42

May Dr. P: Hydrocodone #15, Lorazepam #20

ER#2: Hydrocodone #20, Lorazepam #20

August ER#3: Oxycodone #20, Lorazepam #21

ER#4: Oxycodone #21, Lorazepam #20

September ER#5: Oxycodone #20, Lorazepam #6

Dr. L: Methadone #120

October Dr. L: Methadone #120

ER #6: Hydrocodone #15

Dr. W: Lorazepam #8

November ER #3: Oxycodone #5, Lorazepam #4

Dr. L: Methadone #120

December Dr. L: Methadone #120

January ER #7: Lorazepam #4

February 1, 2013 Dr. L: Methadone #30

Death: February 7, 2013

Methadone, Clonazepam, Phenytoin, Carbamazepine, Gabapentin

275 Pharmacies

2013 By the Numbers	
Average Scripts Per Patient - PDMP Match, No Illicit, Doctor Shopper	23.5
Highest Number of Scripts for 1 patient	123
Average Number of Pharmacies	3.12
Highest Number of Pharmacies for 1 Patient	21
Percent of Pharmacies With a Single Death - 1 Pharmacy had 12 deaths	54.2%

Specific Medications on CURES

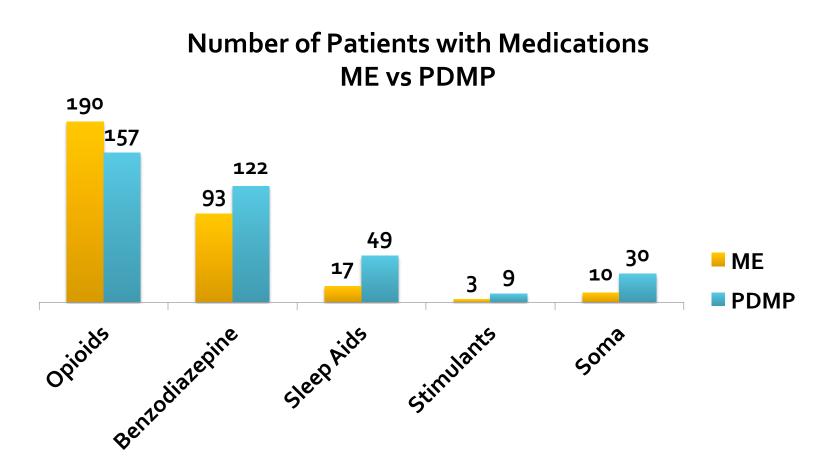
(Number of Patients)

33 Medications; 4366 Rx

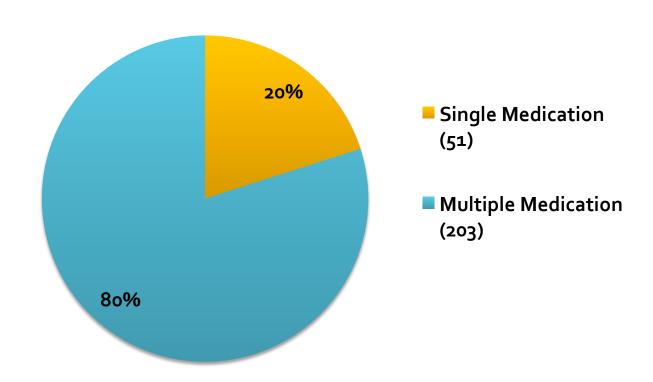
OPIOIDS BENZODIAZEPINES SLEEP STIMULANTS OTHER

Hydrocodone	123	Chloriazepoxide	17	Oxazepam	3
Oxycodone	84	Tempazepam	17	Oxymorphone	3
Clonazepam	44	Methadone	14	Phenobarbitol	3
Zolpidem	43	Fentanyl	13	Chloral Hydrate	2
Alprazolam	39	Buprenorphine	11	Dronabinol	2
Lorazepam	37	Amphetamine	7	Zaleplon	2
Morphine	32	Testosterone	6	Clorazepate	1
Carisoprodol	30	Triazolam	6	Estrogen	1
Codeine	27	Lunesta	4	Lisdexamefetamine	1
Diazepam	26	Lyrica	4	Methylphenidate	1
Hydromorphone	20	Phentermine	4		

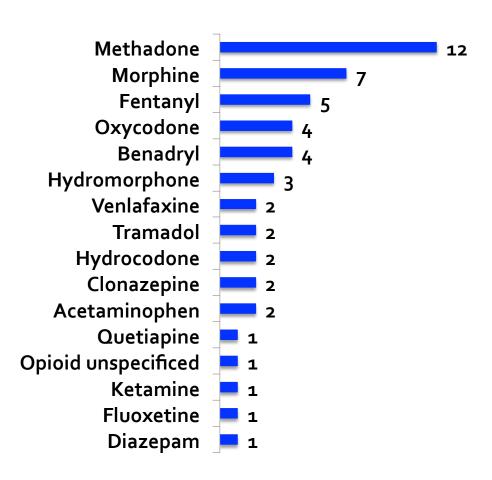
Types of Rx



Number Medications on ME Report



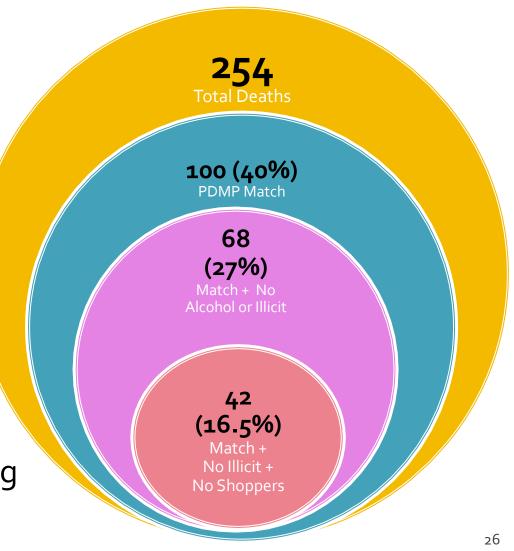
Single Medications on ME Report



PDMP Match

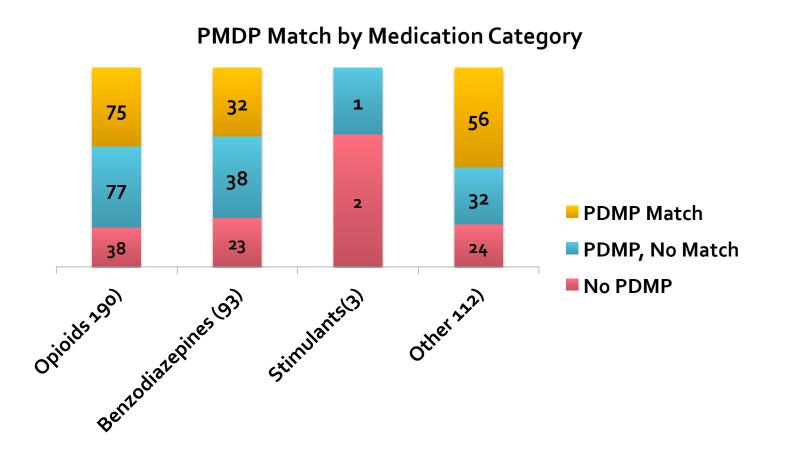
Rx 2 months before death matches ME report

- PDMP Match, No Alcohol, No Illicit, No Doc Shop
 - 64% Female
 - 51 years Ave
 - More Rx
 - Less Providers
 - Less Pharmacies
 - More Single Rx
 - More Opioids, Sleep Aids, High Morphine Equivalents, Long Acting



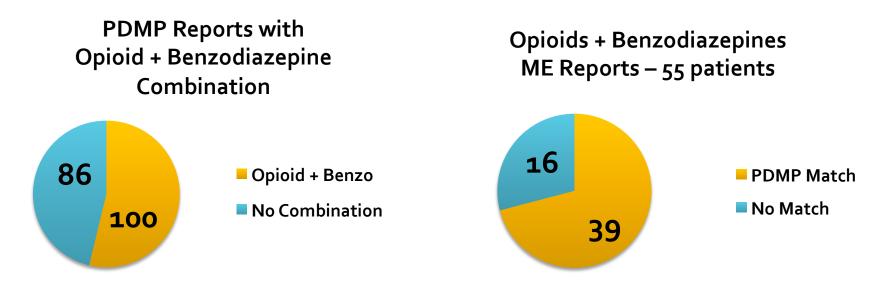
Rx Types and PDMP Match

By Number of Patients



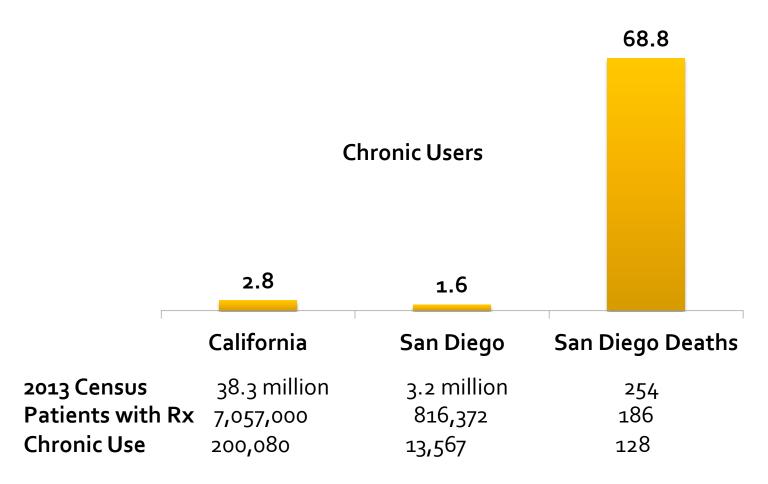
Opioids + Benzodiazepines

- All PDMP Reports 54% (100 patients)
- ME Deaths 21% (55)
- ME/PDMP Match 71% (39)



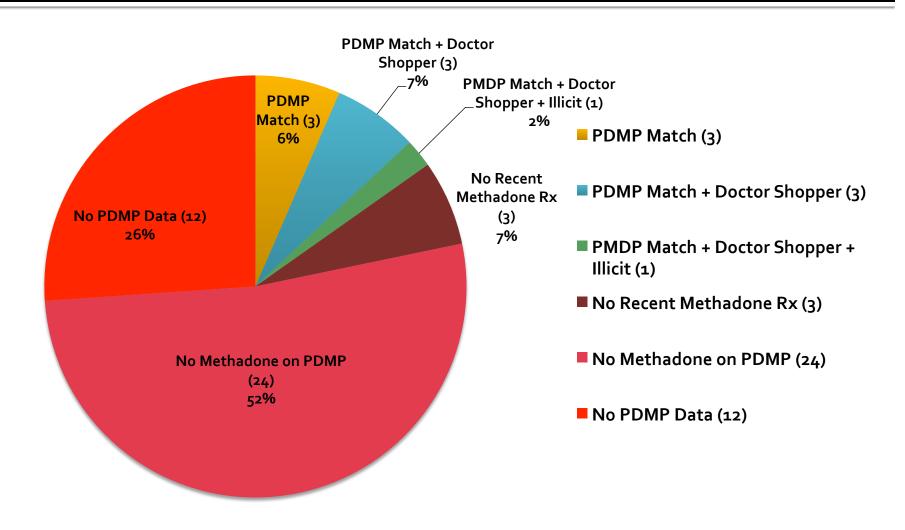
Chronic Use 3 or More Consecutive Months For Same Rx

69% of Deaths were Chronic Users; 96% of all Rx

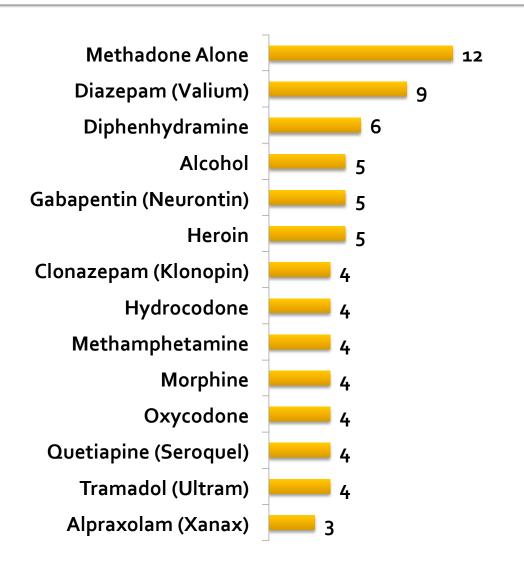


Methadone Deaths

46 total; 7 from CURES; 39 or 85% outside CURES



Methadone Deaths: Many Chemical Combinations



Other Medications Found with Methadone

Lamotrigine (1)

Amitriptyline (1)

Benzodiazepine (1)

Carbamazepine (1)

Codeine (1)

Doxepin (1)

Nortriptyline (1)

Phenytoin (1)

Sertraline (1)

Cocaine (2)

Fluoxetine (2)

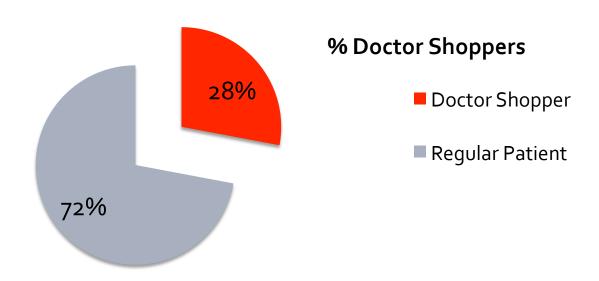
Hydromorphone (2)

Trazodone (2)

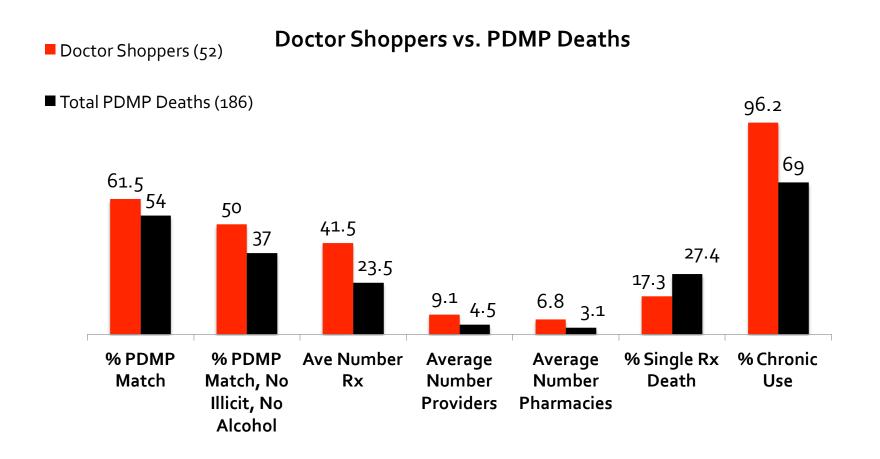
Doctor Shopping

4 providers + 4 pharmacies in 12 months

- 52 Patients (28% of all PDMP Reports)were Doctor Shoppers
- "The Heavy Half" = Received 51% of all Rx
- 50/50 Male/Female



Doctor Shopper v PDMP Deaths

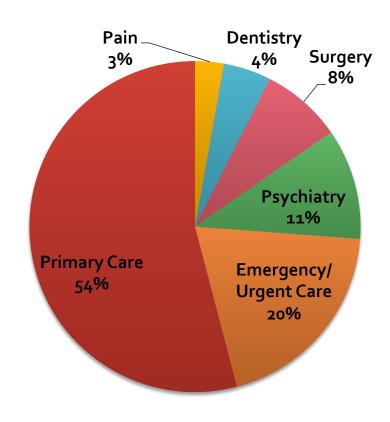


Providers at-a-Glance

Total Number of Providers	71 3
Average # of Providers per patient	4.5
Maximum providers per patient -PDMP Match, No Illicit, Doctor Shopper	36
Percentage of Providers With Single Death - 3 Providers had 4 Deaths	85%

Who are the Prescribers?

713 total



PRIMARY CARE

Cardiology
Endocrinology
Family Practice (17%)
General Practice
Gastroenterology
GYN
Infection Disease
Internal Medicine (22%)
Nephrology
Neurology
Neurology
Nurse Practitioner (2.6%)
Oncology
Physician Assistant (6.3%)
PM&R

Rheumatology

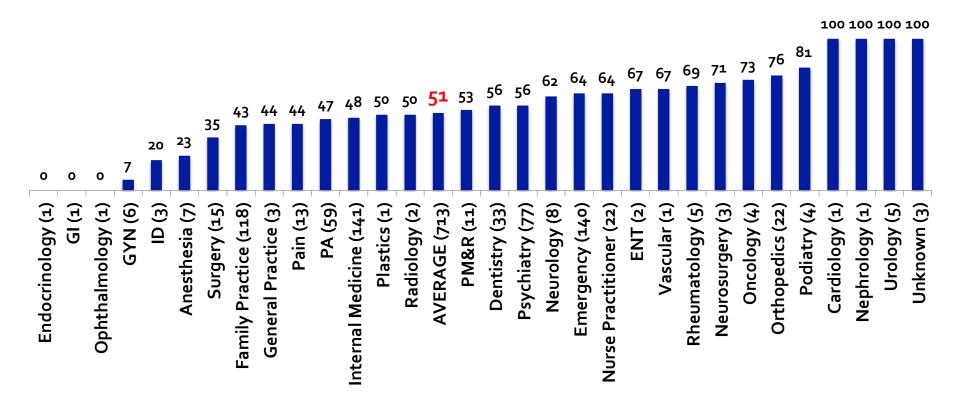
PAIN

Anesthesia Pain

SURGERY

ENT
General
Neurosurgery
Ophthalmology
Orthopedics
Plastics
Podiatry
Radiology
Urology
Vascular

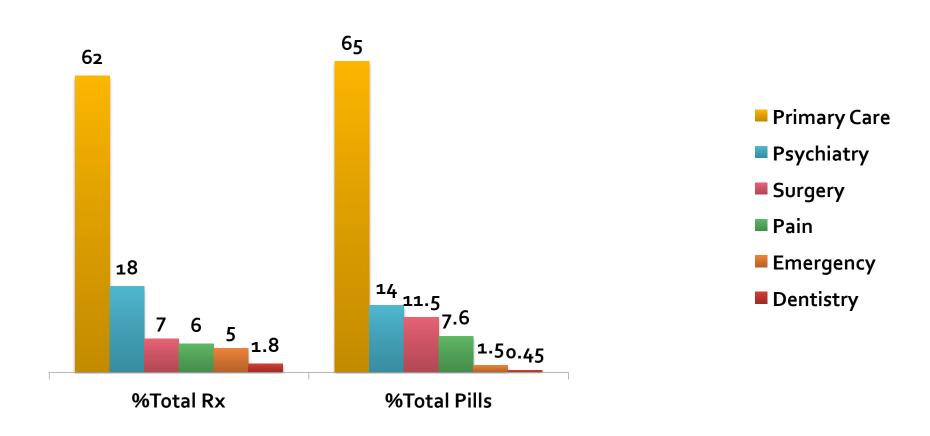
Where do Doctor Shoppers Go?



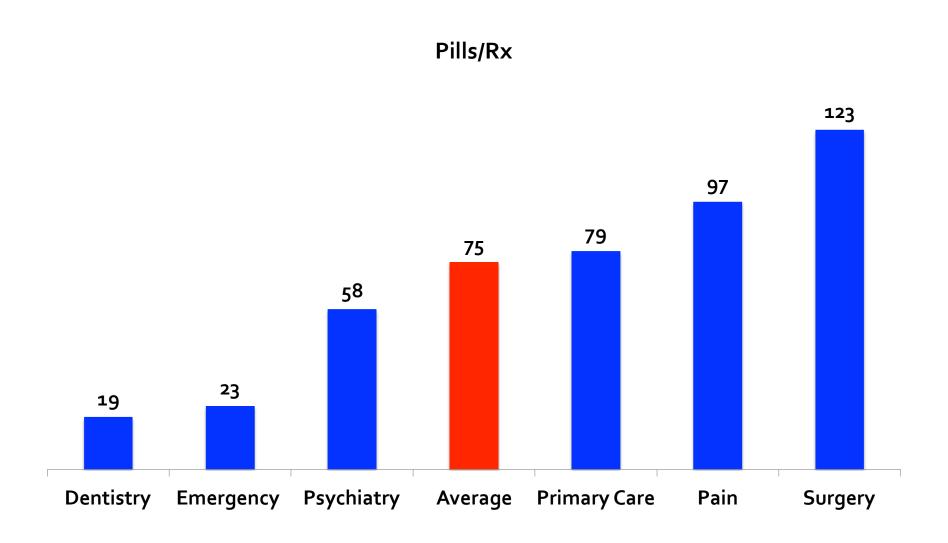
- Neurology 17.1 Rx per Doctor Shopper v 3.1
- Urology 100% to Doctor Shoppers

Who is Prescribing the Most?

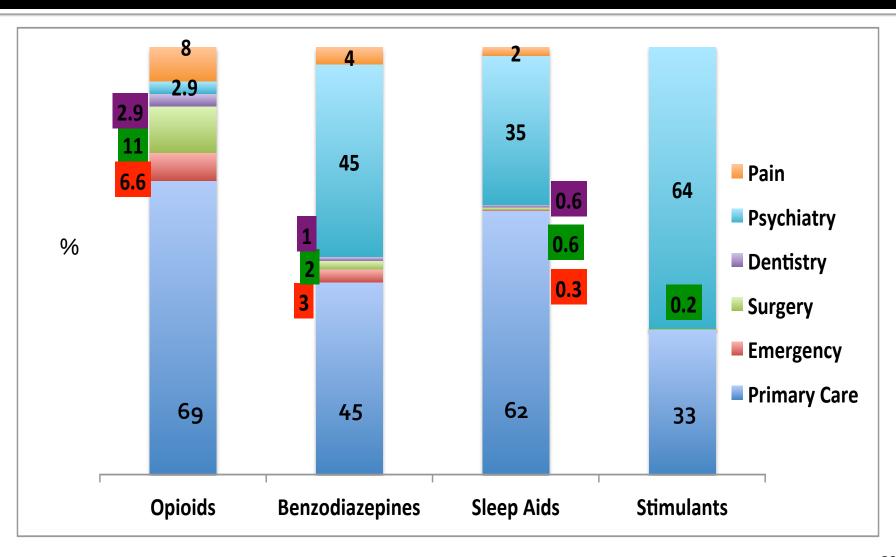




How many pills do you need?

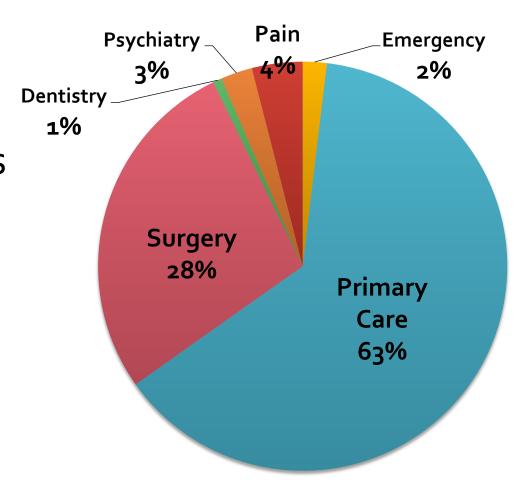


Specialists and Medication Types



Who is Prescribing Hydrocodone?

- 95,821 pills
- 990 Rx
- 123 Patients



Where are opportunities to save lives?



Department of Justice - Bureau of Narcotic Enforcement Controlled Substance Utilization Review and Evaluation System Patient Activity Report

Patient Last Name: Patient First Name: Patient DOB:

Patient DOB: Feb 27, 1956

Date Range: Between Feb 7, 2012 and Feb 7, 2013

Date Range: Between Feb 7, 2012 and Feb 7, 2013

atient Last Name	Patient First Name	Patient DOB	Patient Gender Code	Date Filled	Drug Name	Drug Form	Strength	Quantity	Pharmacy License Number	Pharmacy Name	Prescriber DEA Number	Prescriber Name	RX Number
			F	04/12/2012	APAP/ HYDROCODONE BITARTRATE	TAB	500 MG-5 MG	10	PHY46897	WALGREENS NO 07869	BP6090586		875313
			F	04/20/2012	ACETAMINOPHEN/ CODEINE	TAB	300 MG-30 MG	40	PHY46897	WALGREENS NO 07869	FR2197792		878609
			F	04/20/2012	LORAZEPAM	TAB	1 MG	42	PHY46897	WALGREENS NO 07869	FR2197792		878608
			F	05/06/2012	APAP/ HYDROCODONE BITARTRATE	TAB	500 MG-5 MG	15	PHY46897	WALGREENS NO 07869	FP0049608		884305
			F	05/06/2012	LORAZEPAM	TAB	1 MG	10	PHY46897	WALGREENS NO 07869	FP0049608		884306
			F	06/15/2012	APAP/ HYDROCODONE BITARTRATE	TAB	500 MG-5 MG	20	PHY46897	WALGREENS NO 07869	BS0613732		904772
			F	06/15/2012	LORAZEPAM	TAB	1 MG	20	PHY46897	WALGREENS NO 07869	BS0613732		904771
			F	08/04/2012	APAP/ OXYCODONE	TAB	325 MG-5 MG	20	PHY46897	WALGREENS NO 07869	FM3195042		929519
			F	08/04/2012	LORAZEPAM	TAB	1 MG	21	PHY46897	WALGREENS NO 07869	FM3195042		929518
			F	08/24/2012	APAP/ OXYCODONE	TAB	325 MG-5 MG	21	PHY46897	WALGREENS NO 07869	BM5414014		939278
			F	08/24/2012	LORAZEPAM	TAB	1 MG	20	PHY46897	WALGREENS NO 07869	BM5414014		939276
			F	09/17/2012	APAP/ OXYCODONE	TAB	325 MG-5 MG	20	PHY46897	WALGREENS NO 07869	BC6618613		951090
			F	09/17/2012	LORAZEPAM	TAB	1 MG	6	PHY46897	WALGREENS NO 07869	BC6618613		951091
			F	09/24/2012	METHADONE HYDROCHLORIDE	TAB	10 MG	120	PHY43228	SHARP REES STEALY PHARMACY #5	BL3094810		7792523
			F	10/23/2012	METHADONE HYDROCHLORIDE	TAB	10 MG	120	PHY43228	SHARP REES STEALY PHARMACY #5	BL3094810		7795479
			F	10/28/2012	APAP/ HYDROCODONE BITARTRATE	TAB	500 MG-5 MG	15	PHY46897	WALGREENS NO 07869	AG6813477		972613
			F	10/31/2012	LORAZEPAM	TAB	0.5 MG	8	PHY46897	WALGREENS NO 07869	FM0969254		974543
			F	11/06/2012	APAP/ OXYCODONE	TAB	325 MG-5	5	PHY46897	WALGREENS NO 07869	FM3195042		977365

- Co-Prescribing
- Escalating Dosage
- Is Medication Necessary?
- Drug Screens
- Pharmacy
- Health Plan

*** Confidential **

Disclaimer

The Patient Activity Report (PAR) is compiled from information maintained in the Department of Justice's Controlled Substance Utilization Review and Evaluation System (CURES).
The CURES maintains Schedule III, Schedule III, and Schedule IV prescription information that is received from California Pharmacies and is therefore only as accurate as the

Last Update: 07/11/2014 Run Date: Jul 11, 2014 01:32

Best Practices

- PDA Task Force
- PDA Medical Task Force
- PDA Pharmacy Committee
- "ONE SAN DIEGO"



CURES 2.0

CURES makes you a better doctor.

State of California Department of Justice

Office of the Attorney General



Kamala D. Harris

Attorney General

AG Home Page

Tools & Resources

Health Information Privacy (HIPAA Guidelines)

FAQ's

PDMP (CURES)

User Agreement

The California Prescription Drug Monitoring Program (PDMP), **CURES**, is committed to assisting in the reduction of pharmaceutical drug diversion without affecting legitimate medical practice and patient care. The CURES system is designed to identify and deter drug abuse and diversion through accurate and rapid tracking of Schedule II through IV controlled substances. The role of the PDMP entrusts that well informed prescribers and pharmacists can and will use their professional expertise to evaluate their patients care and assist those patients who may be abusing controlled substances.

NEW FEATURES

- Dash Board
- Alerts
- Provider Communication
- Delegate Feature
- Save Reports
- Contract



Skip to c

PDA Report Card

	2015 Preliminary Prescription Di	rug (Rx)) Abuse	Repor	t Card	
	Indicator	2010	2011	2012	2013	2014
1	 Unintentional Rx-Related Deaths Number Rate per 100,000 residents¹ 	228 (8.5)	267 (9.8)	268 (9.8)	259 (8.2)	244 (7.6)
2	 Emergency Room Painkiller-related Discharges Number Rate per 100,000 residents 	2931 (91.1)	3,278 (105.2)	3,791 (121.2)	5,723 (181.7)	Not Available until 2016
3	Student Self Report Rx Misuse		19.6%		17%	
4	 Total Adult Treatment Admissions Percentage of Prescription Painkillers Percentage of Heroin 	13,893 4.1% 21.4%	13,696 4.2% 22.0%	14,383 4.7% 23.1%	16,629 4.5% 24.8%	16,104 4.5% 27.7%
5	Arrestees Self Report of Rx Misuse					
	AdultJuvenile	40% 31%	41% 37%	38% 40%	43% 37%	39% 37%
6	 Rx Prosecutions Rx-specific Fraud Charge Other Charges with Rx-involved 	465 1,341	505 1,288	387 1,311	311 1,193	214 1,034
7	Pharmacy Robberies/Burglaries	14	26	8	5	8
8	 Pounds of Safely Disposed Medications Take Back Events Sheriff's Department Collection Boxes 	7,446 3,400	13,008 5,128	16,707 9,902	18,732 13,872	17,676 13,079
9	Dispensed Pills Per County Resident Painkillers ² Anti-anxiety Stimulants	33.4 13 4.3	35.9 13.3 4.5	37.9 13.8 4.8	36.3 13.7 4.9	36.3 ³ 13.3 4.7

San Diego CURES Map



Opioid Pills Per Person County of San Diego 2012

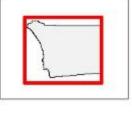


South North Central

Central

North Coastal North Inland

East









D_NOTE_Americal_1989, Foot_US







Emergency and Urgent Care Guidelines

PRESCRIBING

IN EMERGENCY DEPARTMENTS

We care about you. We are committed to treating you safely and in the right way.

Pain relief treatment can be complicated. Mistakes or abuse of pain medicine can cause serious health problems and death.

Our emergency department will only provide pain relief options that are safe and correct.



For your SAFETY, we follow these rules when helping you with your pain.

- We look for and treat emergencies. We use our best judgment when treating pain. These recommendations follow legal and ethical advice.
- You should have only ONE provider and ONE pharmacy helping you with pain. We do not usually prescribe pain medication if you already receive pain medicine from another health care provider.
- If pain prescriptions are needed for pain, we can only give you a small amount.
- We do not refill stolen prescriptions. We do not refill lost prescriptions. If your prescription is stolen, please contact the police.
- We do not prescribe long acting pain medicines: OxyContin, MSContin, Dilaudid, Fentanyl (Duragesic), Methadone, Opana ER, Exalgo, and others.
- We do not provide missing doses of Subutex, Suboxone, or Methadone.
- We do not usually give shots for flare—ups of chronic pain. Medicines taken by mouth may be offered instead.
- Health care laws, including HIPAA, allow us to ask for your medical records. These laws allow us to share information with other health providers who are treating you.
- We may ask you to show a photo ID when you receive a prescription for pain medicines.
- 10. We use the California Prescription Drug Monitoring Program called CURES. This statewide computer system tracts narcotic and other controlled substance prescriptions.

If you need help with substance abuse or addiction, please call

1-888-724-7240

All the emergency departments in San Diego & Imperial Counties have agreed to participate in this important program.













Medication Agreement

PATIENT MEDICATION AGREEMENT

It is important that you follow all these instructions, EXACTLY.

for Painkillers, Anxiety Medication, Stimulants, and all Controlled Substances

- For Chronic Medication= 3 months
- Only 1 provider and 1 pharmacy
- No ED visit
- No refills
- Do not drive if impaired

	These medicines are dangerous. They can cause serious health problems, including death, even if taken as prescribed. They are also addicting.
	You should get your medicine from only ONE provider and ONE pharmacy. This helps prevent side effects and overdoses.
	Take the medication only as you are told. Do not take more medicine than you are prescribed. They need to last you until your next appointment.
	Your medicine is only for you. Do not share your medicine. Do not allow others to use your medicines. Do not sell or trade your medicines.
	Keep your medications secure. We recommend locking them. Lost or stolen medication means other are in danger.
	All emergency departments in San Diego and Imperial Counties have stated that they will not prescribe these medications if you lose them

☐ The dangers of the medicine are greater with anything that makes you

☐ Do not drive a car or do dangerous activities if you are not fully alert

Your treatment will be monitored in different ways. You may be asked to do a drug test. You may be asked to show your pills. The State of

☐ If your provider feels that your medicine is not helping, the medicine will be stopped. You will be treated with other methods.

sleepy. Mixing your medicine with alcohol, street drugs, sleeping





California tracks your prescriptions.

pills, or other drugs can make you sick or die.

or feel you need more.

when on these medicines.







One San Diego



One San Diego



We care about you. We are committed to treating you safely and in the right way.

Pain relief treatment can be complicated. Mistakes or abuse of pain medicine can cause serious health problems and death.

Our emergency department will only provide pain relief options that are safe and correct.

For your SAFETY, we follow these rules when helping you with your pain

1

One Provider-One Pharmacy

2

CURES

3

Medication Agreement

/.

Benzodiazepines + Opioids

5

Emergency Department Guidelines

Medical Examiner Feedback



Pediatric Anticipatory Guidelines



- Lock It
- Count It
- Dispose It
- Avoid It

Two Populations

Prevention



Weaning



How to Say No Nicely

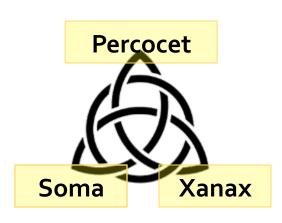


- Don't be the Candy ManDon't be the Candy Land



Red Flag Medications

- Holy Trinity
- Benzodiazepine plus Opioids
- Soma (Carisoprodol)
- Ambien (Zolpidem) long term
- Xanax long term
- Long acting Opioid by ED provider
- Methadone by Primary Care
- Cough syrup with Codeine
- Tramadol



Morphine Equivalents					
Morphine 1 mg	1				
Hydrocodone 5 mg	5				
Tramadol 50 mg	10				

Can marijuana lead to opioid addiction?



Cyclical Vomiting Syndrome



Naloxone





Figure 1. Evzio home-use auto-injector to re the effects of an opioid overdose.

Methadone Clinics



Jails and Prisons





Specific Solutions

Soma – off formula

• Indian Health Clinic

No Benzodiazepines and Opioids

VA

30% functional improvement in 6 weeks

Washington State Work Comp, Dr. Gary Franklin

No opioids for chronic muscular pain

Community Clinic

Methadone – only by primary care

Community Health Group, San Diego

Heath Plans

"One Doctor, One Pharmacy"

Formulary Restrictions

Prior Authorization



References

- Lev, R et al "Methadone Related Deaths Compared to All Prescription Related Deaths" Forensic Science International. 2015
- Lev, R et al "Who is prescribing controlled medications to patients who die from prescription drug abuse?" American Journal of Emergency Medicine. Oct 2015.

SanDiegoSafePrescribing.org



SanDiegoRxAbuseTaskForce.Org

