

San Diego Death Diaries



Roneet Lev, MD FACEP



Prescription Drug Abuse

1

The Epidemic

2

How We Got Here

3

San Diego Death Diaries

4

Best Practices

The Epidemic



- Epidemic caused by the healthcare system

9.4 million Americans on long term pain medication

Aaron Rubin

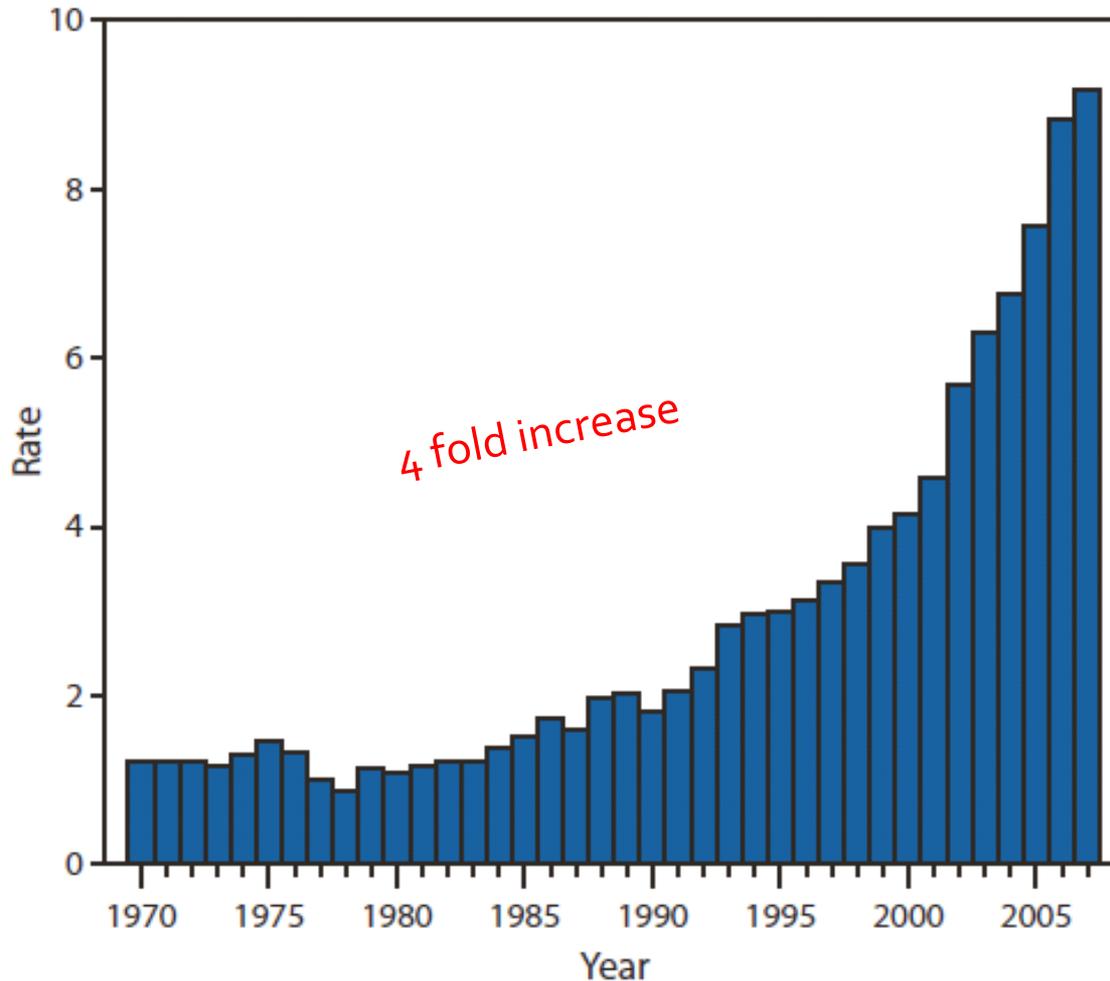
1982 -

- Oxycodone Overdose
2005, age 23



US Deaths

CDC: UNINTENTIONAL DRUG OVERDOSE DEATHS



105 /day from Drugs

44 /day opioid

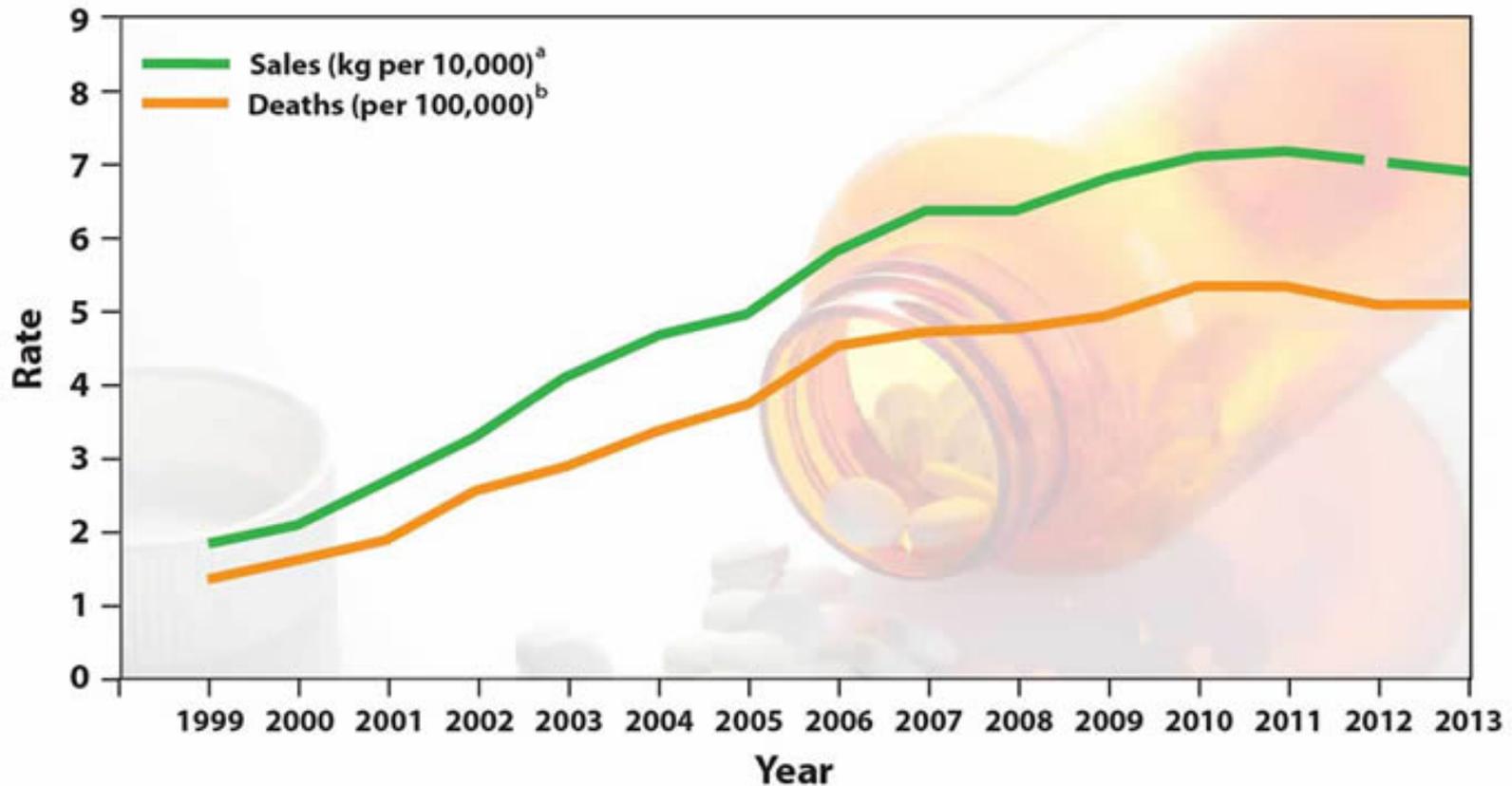
22,767 in 2013

70% opioid

30% benzodiazepine

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

Prescription Painkiller Sales and Deaths



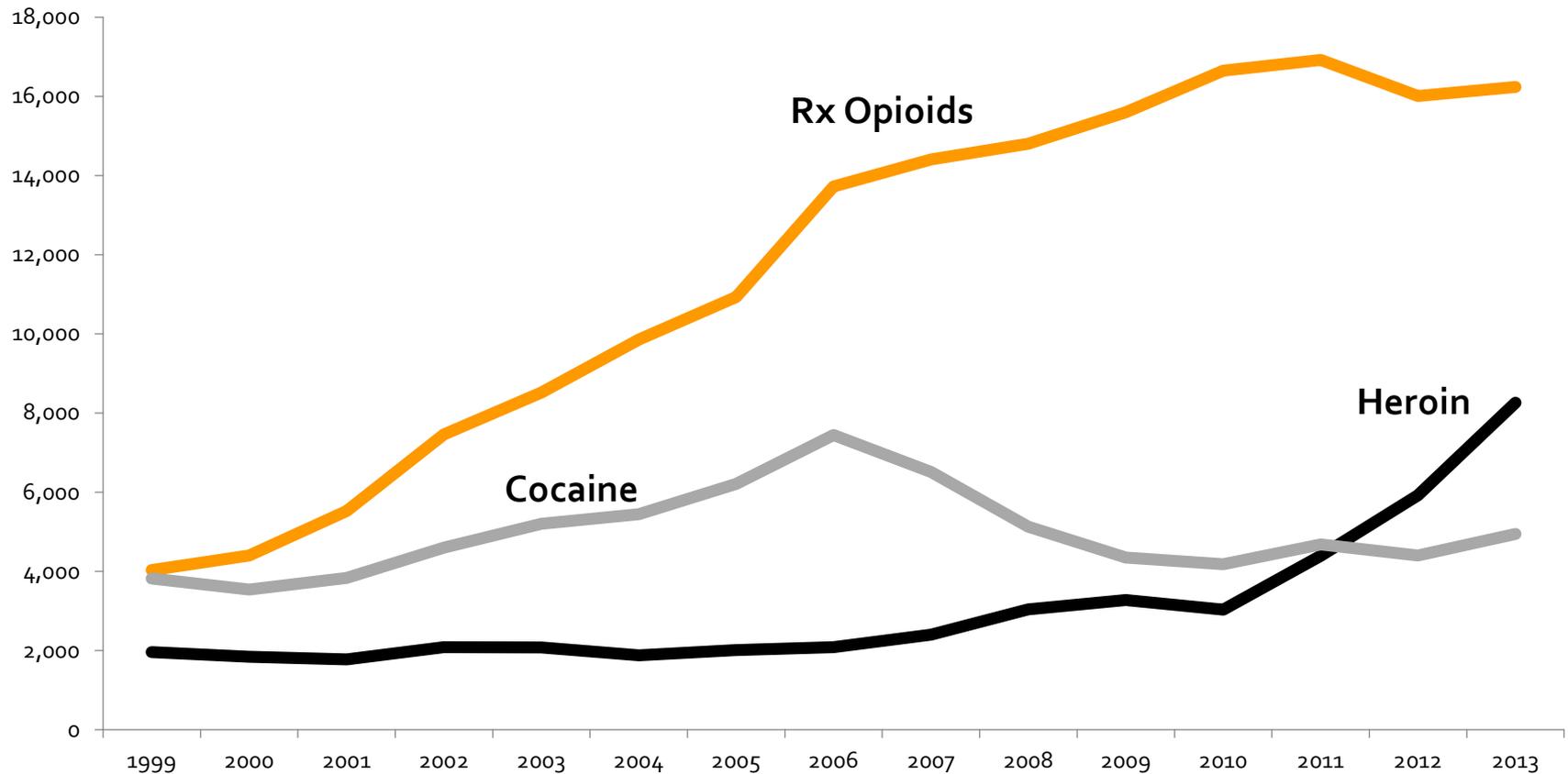
Sources:

^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



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

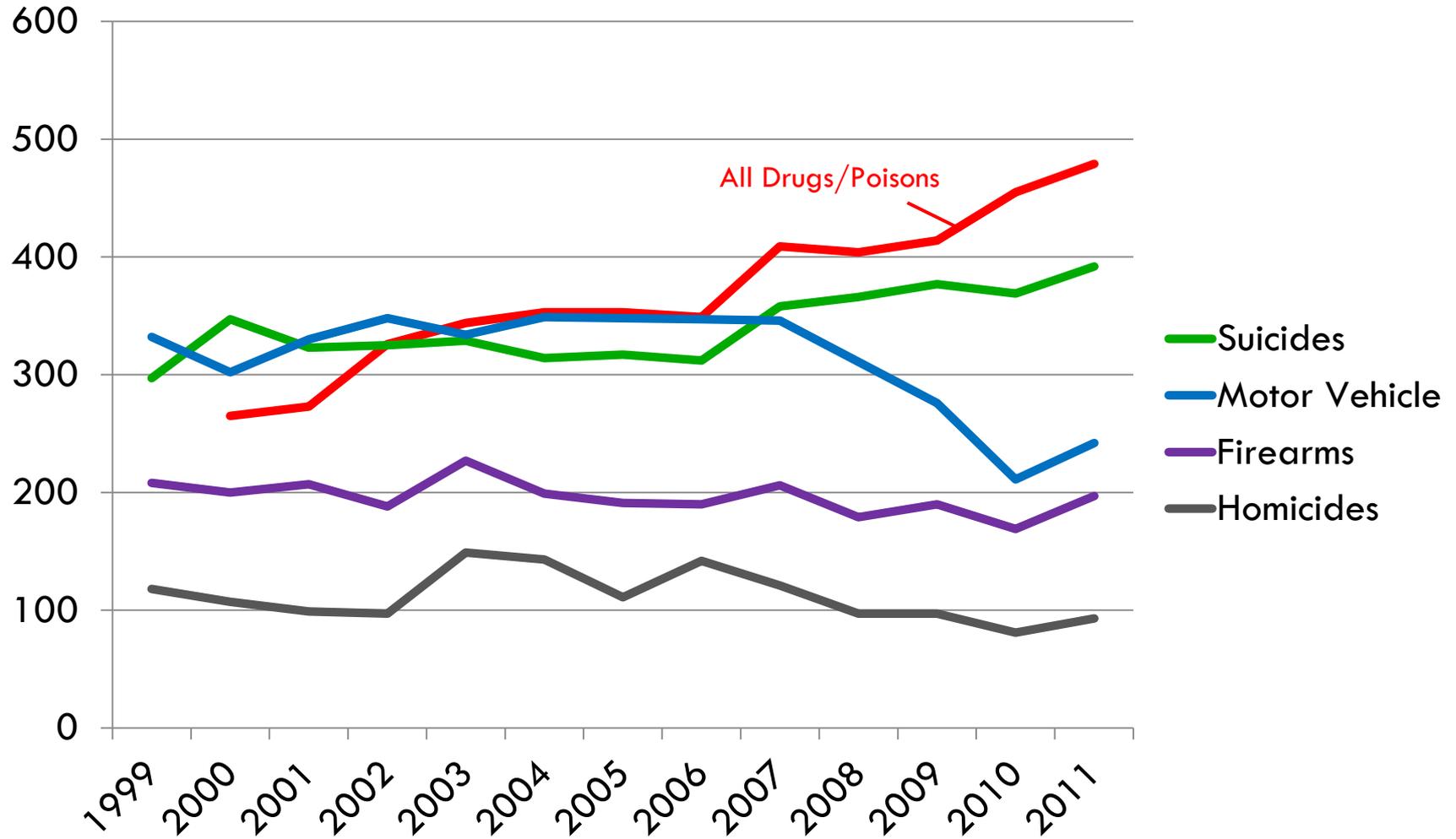
Death is a Fact.

**Everything Else is
Conjecture.**



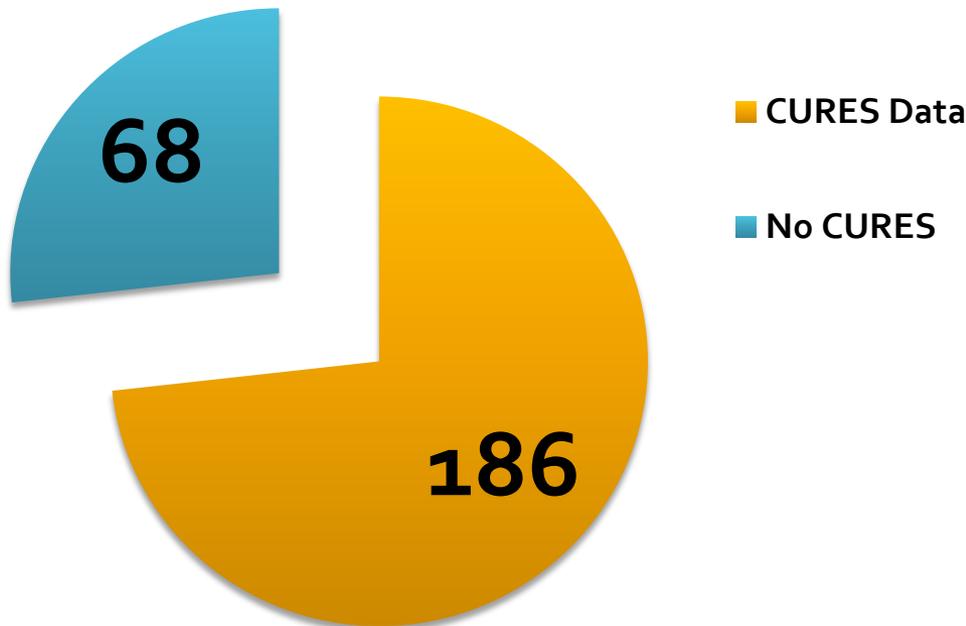
**William Farr
1807 - 1883**

San Diego Non-Natural Deaths



San Diego Rx Death Data

254 Prescription Related Deaths
in San Diego 2013



- 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	Clonazepam 1 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	Clonazepam, 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 60 mg , Ambien

Autopsy: Morphine, Ambien, Sertraline, Hydroxyzine

Death Diary: 56 Year Old Female

“Start on methadone, End on Methadone”

23 Scripts
10 Providers

February, March	No Meds
April	ER#1: Hydrocodone #10 Dr. R: Codeine#40, Lorazepam #42
May	Dr. P: Hydrocodone #15, Lorazepam #20
June	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)

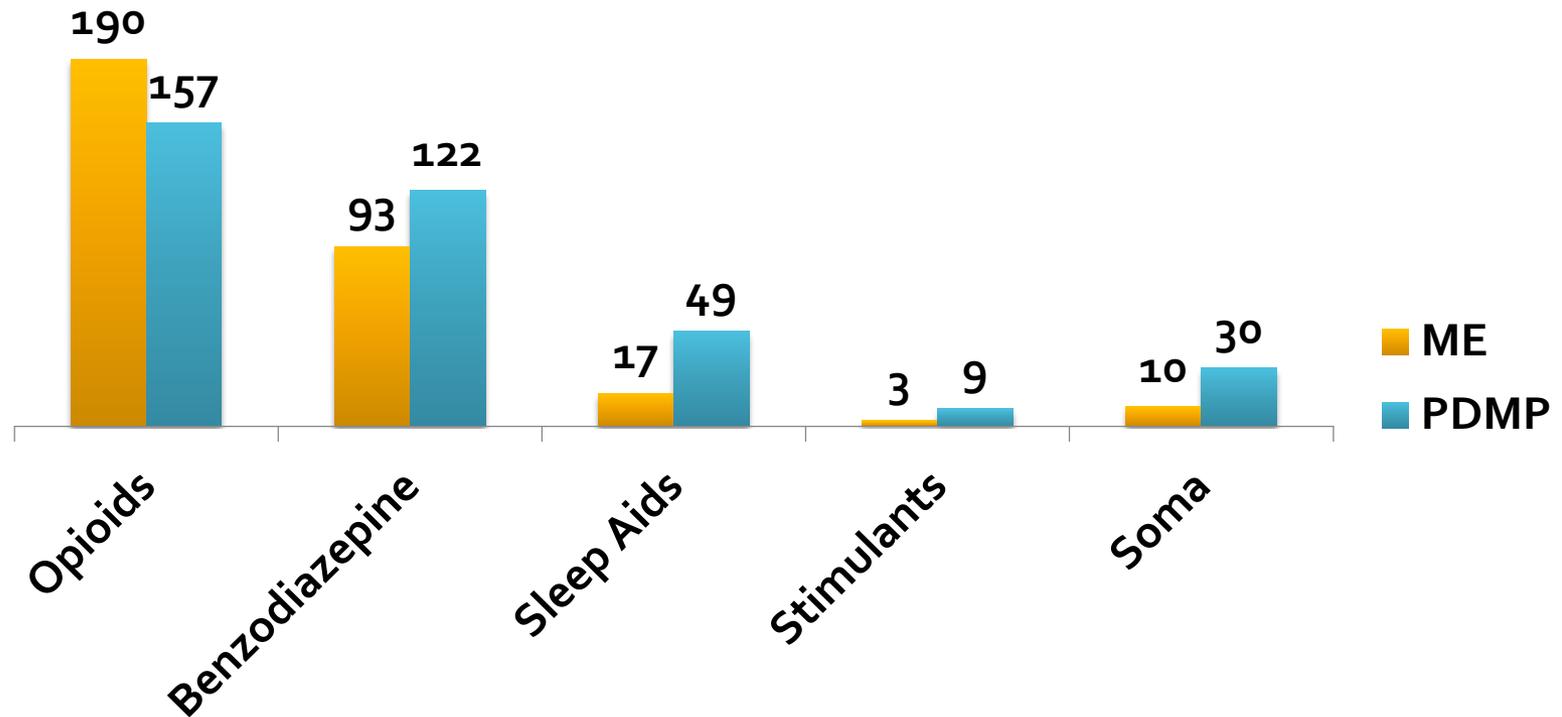
33 Medications; 4366 Rx

OPIOIDS BENZODIAZEPINES SLEEP STIMULANTS OTHER

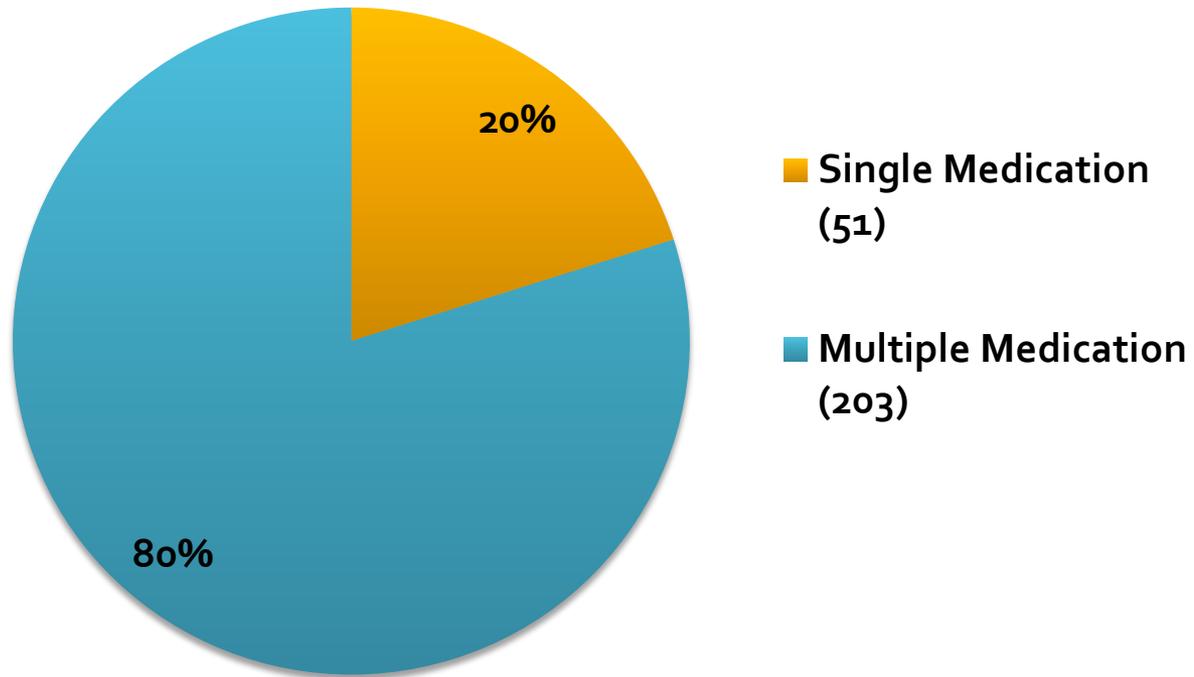
Hydrocodone	123	Chloriazepoxide	17	Oxazepam	3
Oxycodone	84	Tempazepam	17	Oxymorphone	3
Clonazepam	44	Methadone	14	Phenobarbitol	3
Zolpidem	43	Fentanyl	13	Chloral Hydrate	2
Alprazolam	39	Buprenorphine	11	Dronabinol	2
Lorazepam	37	Amphetamine	7	Zaleplon	2
Morphine	32	Testosterone	6	Clorazepate	1
Carisoprodol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

Types of Rx

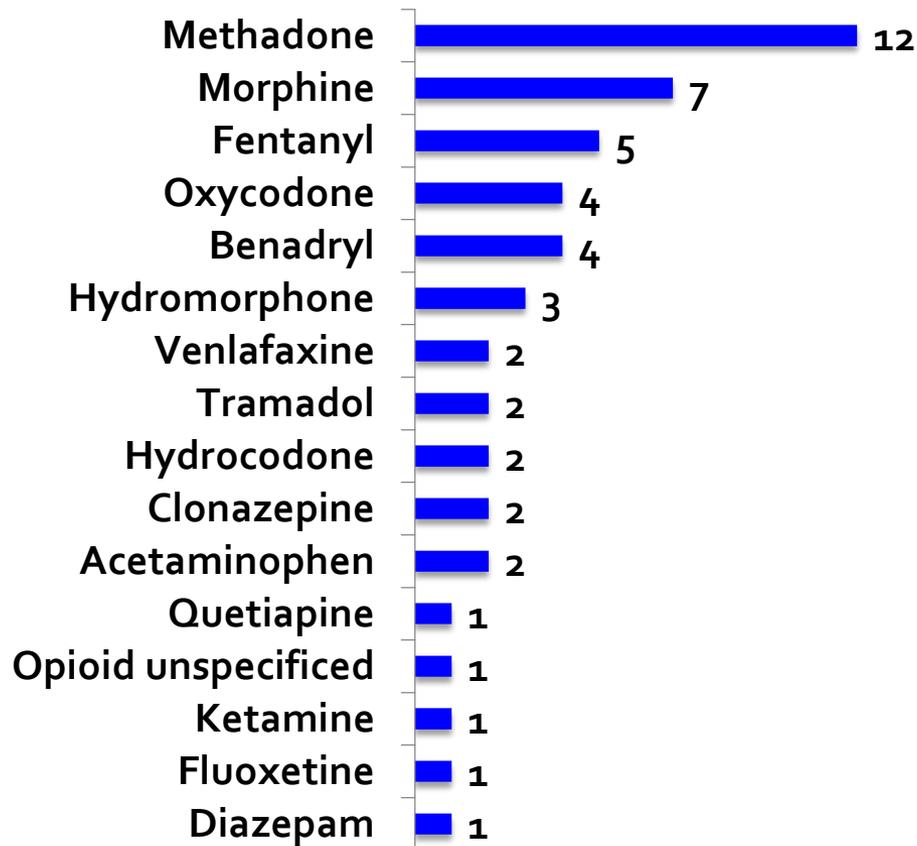
Number of Patients with Medications
ME vs PDMP



Number Medications on ME Report



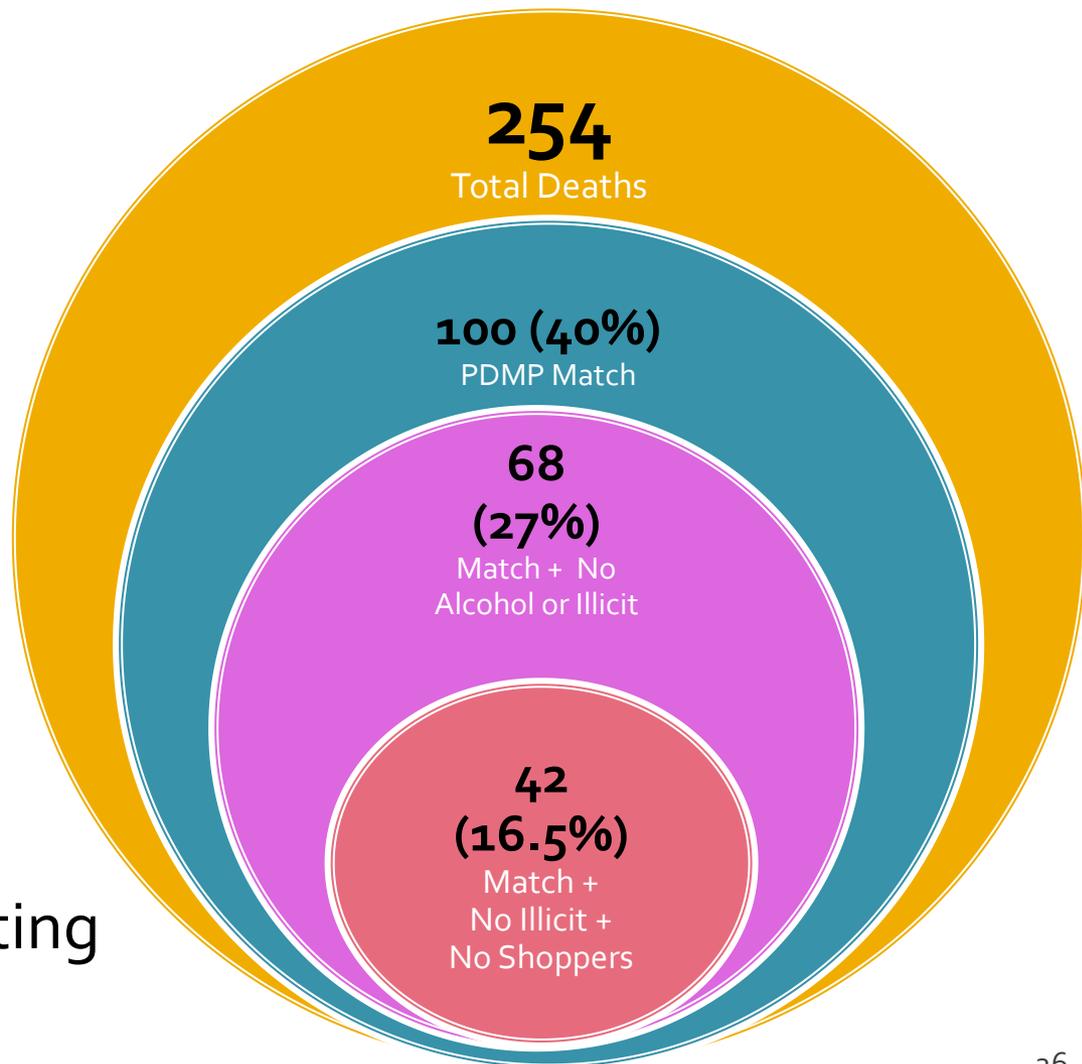
Single Medications on ME Report



PDMP Match

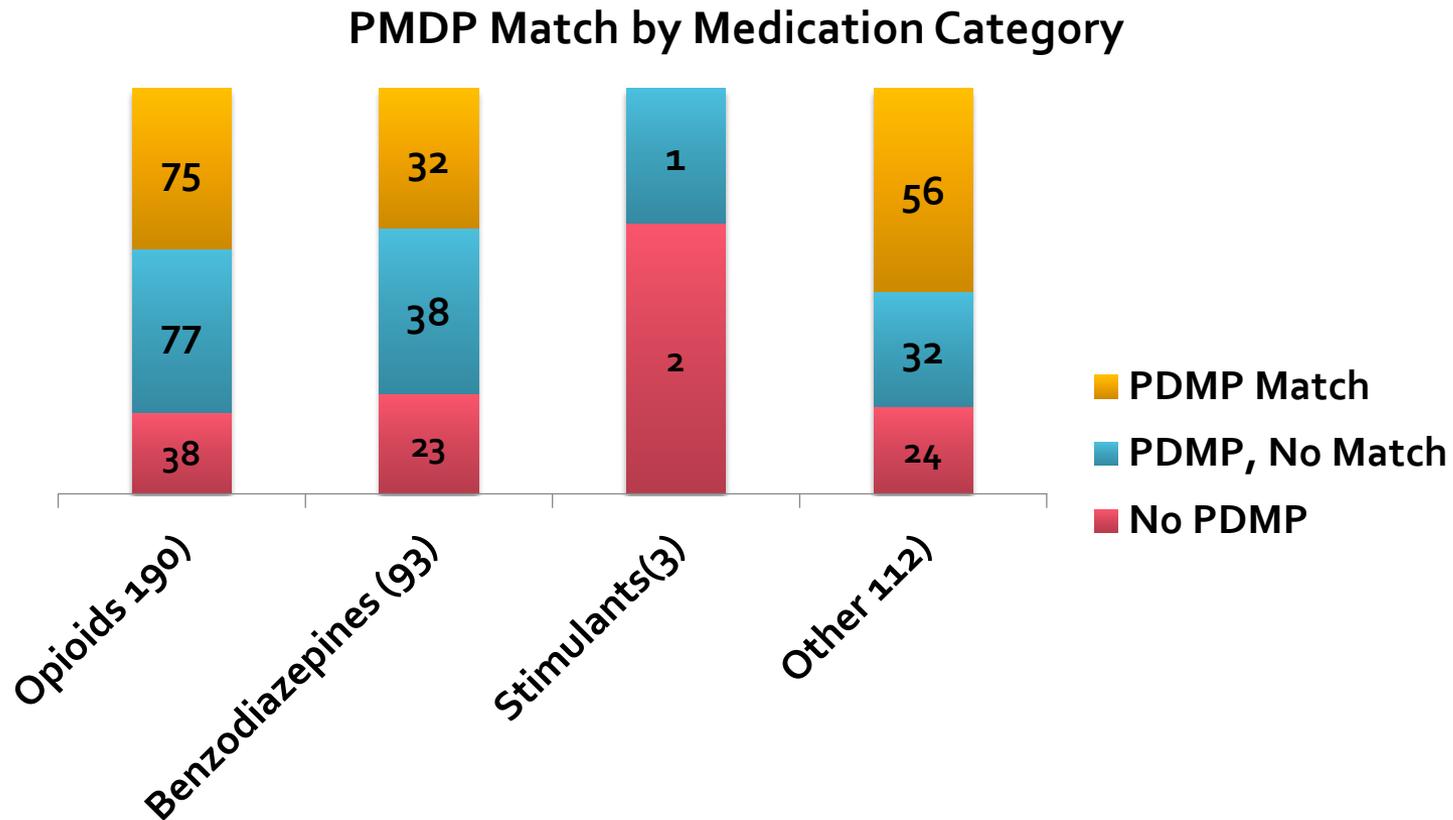
Rx 2 months before death matches ME report

- 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

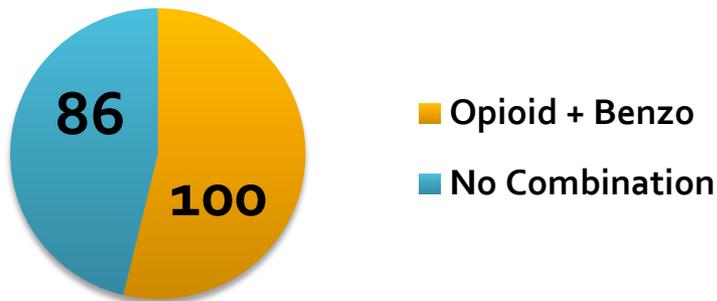
By Number of Patients



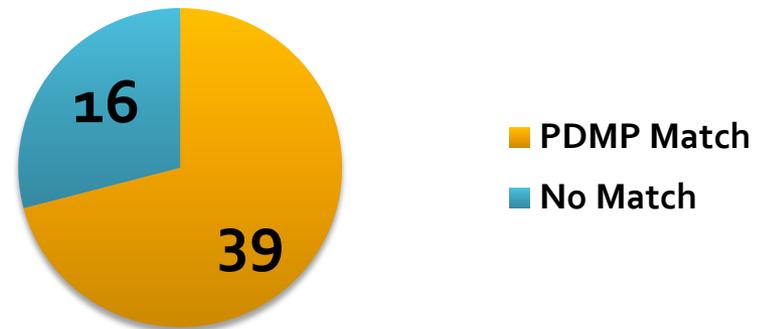
Opioids + Benzodiazepines

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

PDMP Reports with
Opioid + Benzodiazepine
Combination



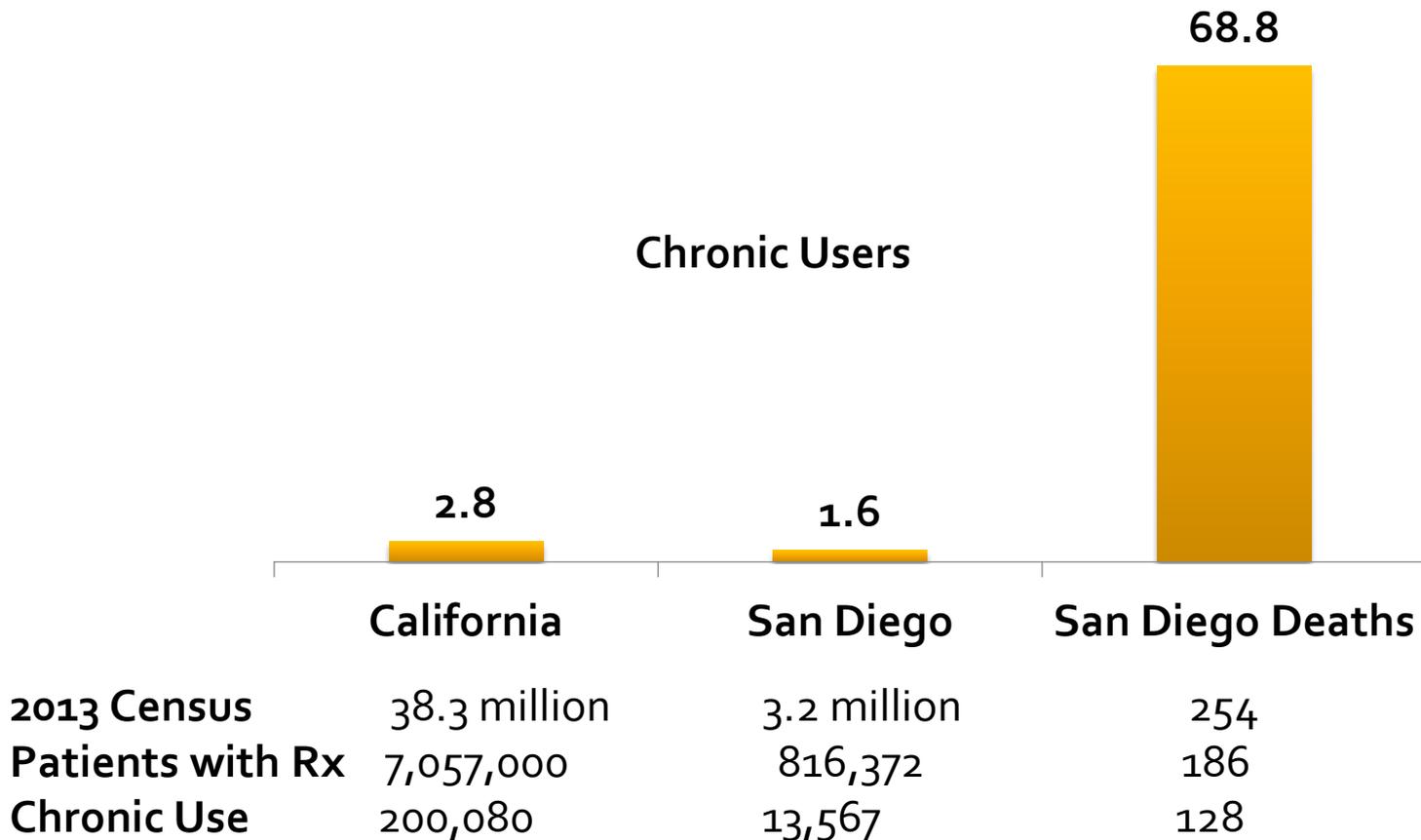
Opioids + Benzodiazepines
ME Reports – 55 patients



Chronic Use

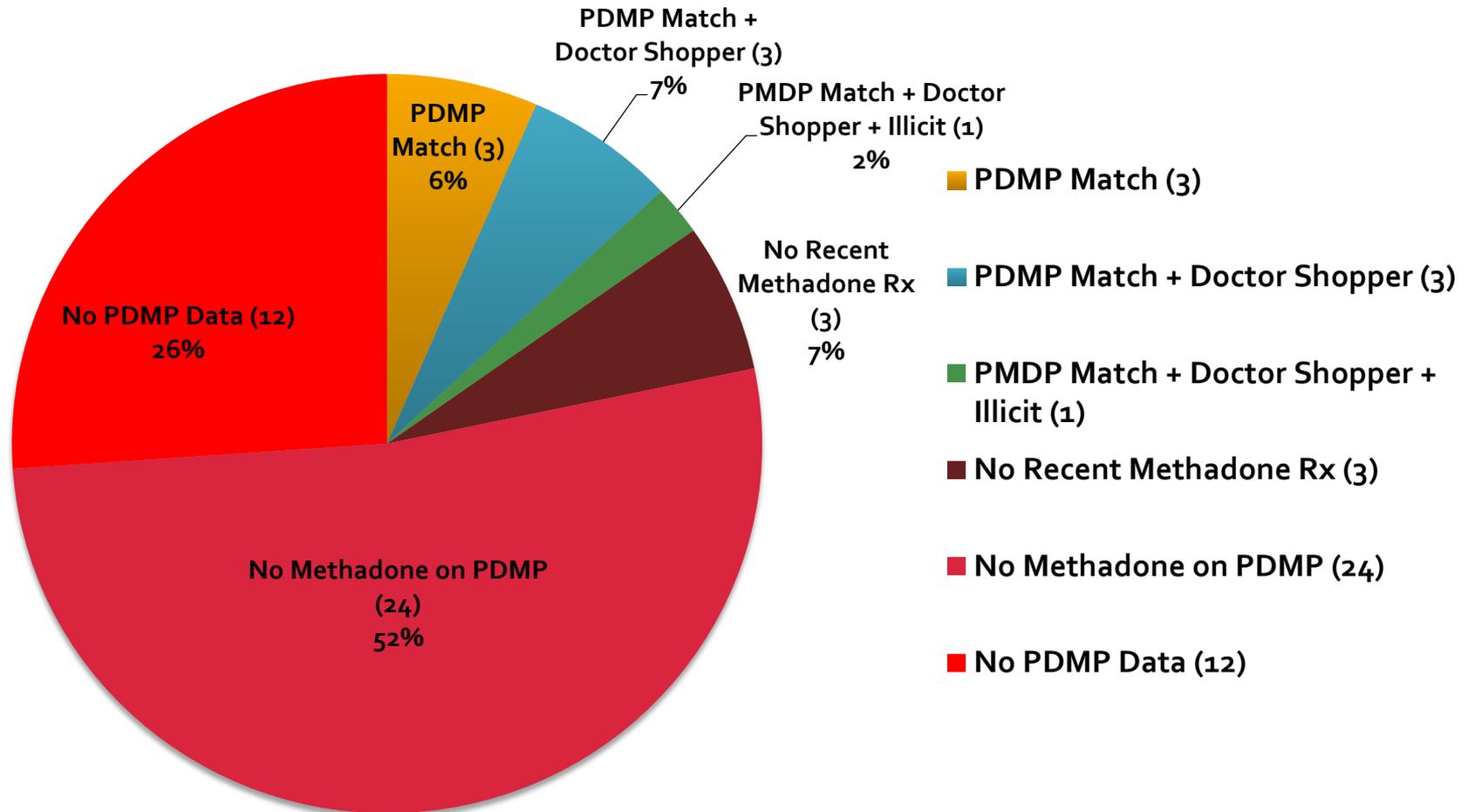
3 or More Consecutive Months For Same Rx

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

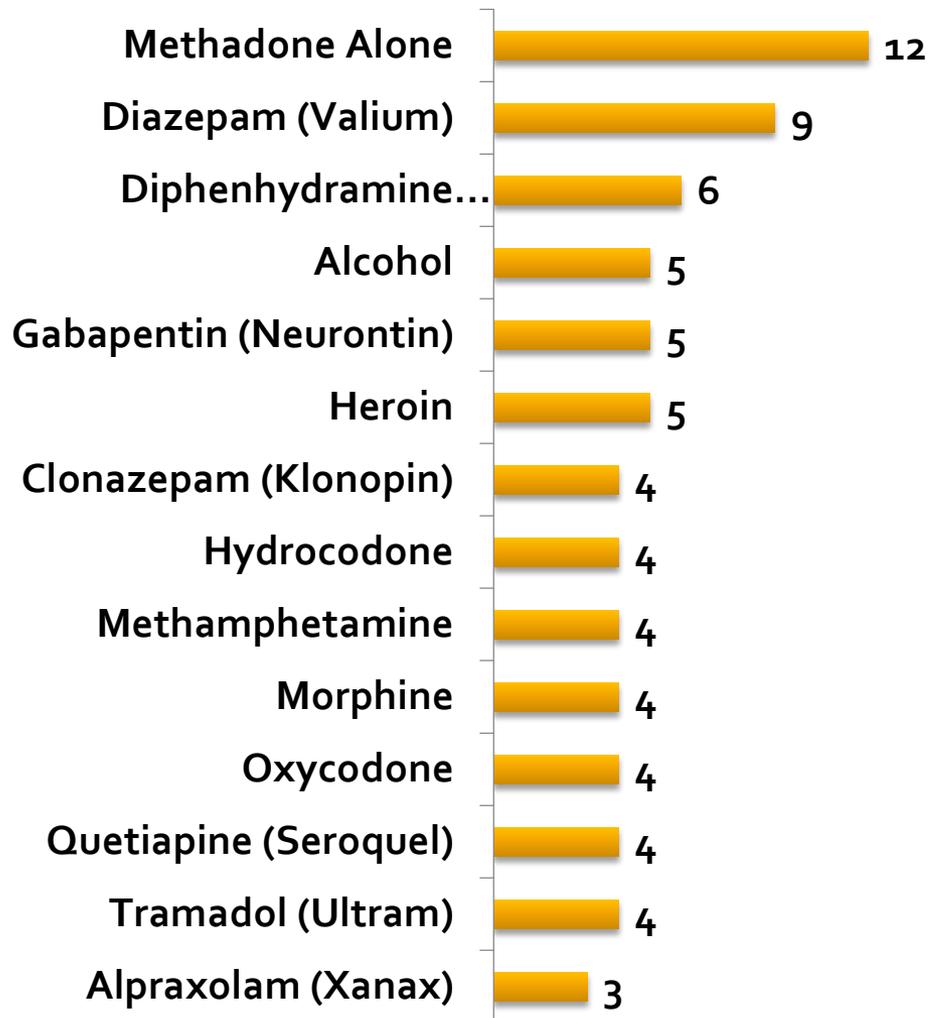


Methadone Deaths

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



Methadone Deaths: Many Chemical Combinations



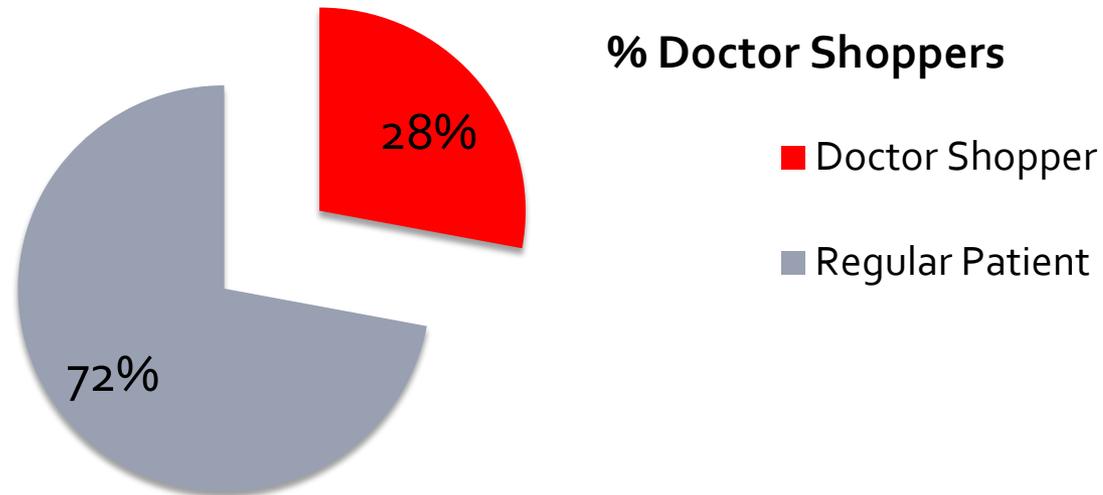
Other Medications Found with Methadone

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)

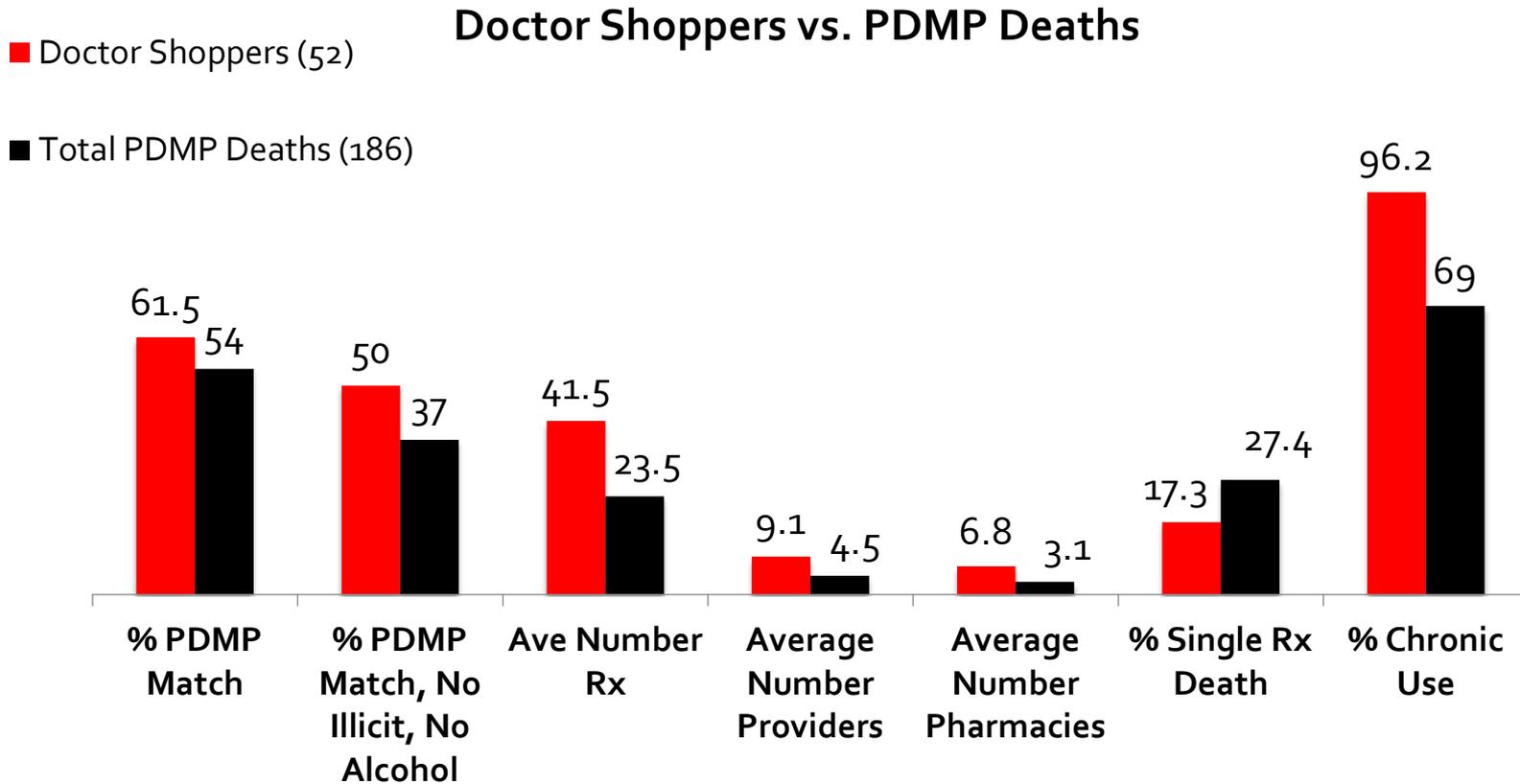
Doctor Shopping

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

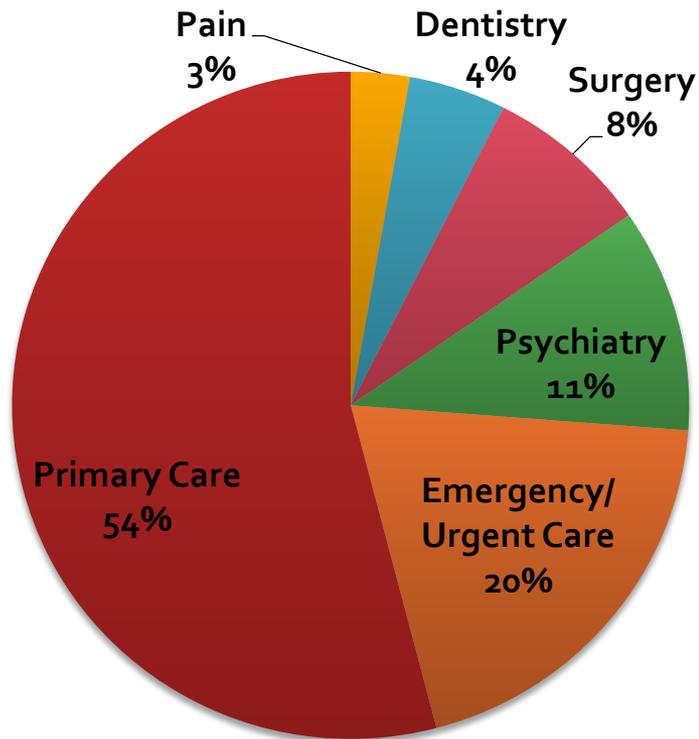


Providers at-a-Glance

Total Number of Providers	713
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
Nurse Practitioner (2.6%)
Oncology
Physician Assistant (6.3%)
PM&R
Rheumatology

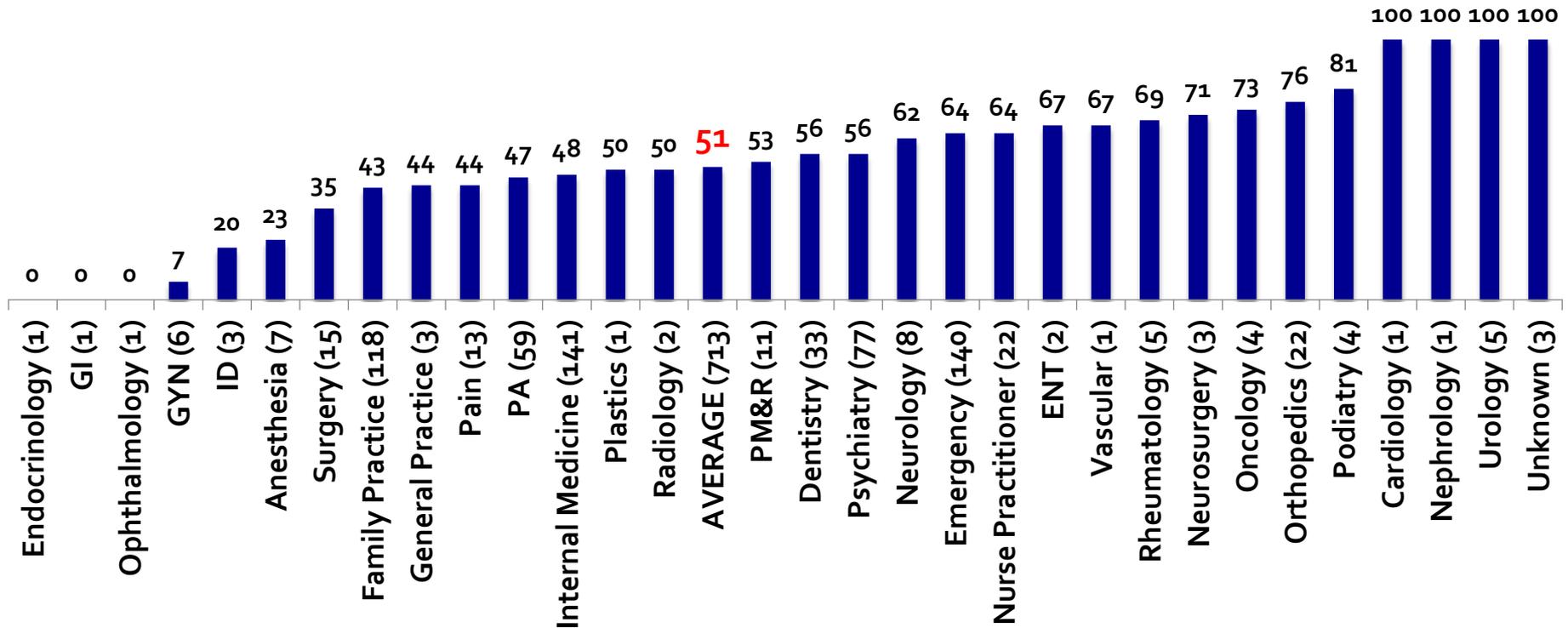
PAIN

Anesthesia
Pain

SURGERY

ENT
General
Neurosurgery
Ophthalmology
Orthopedics
Plastics
Podiatry
Radiology
Urology
Vascular

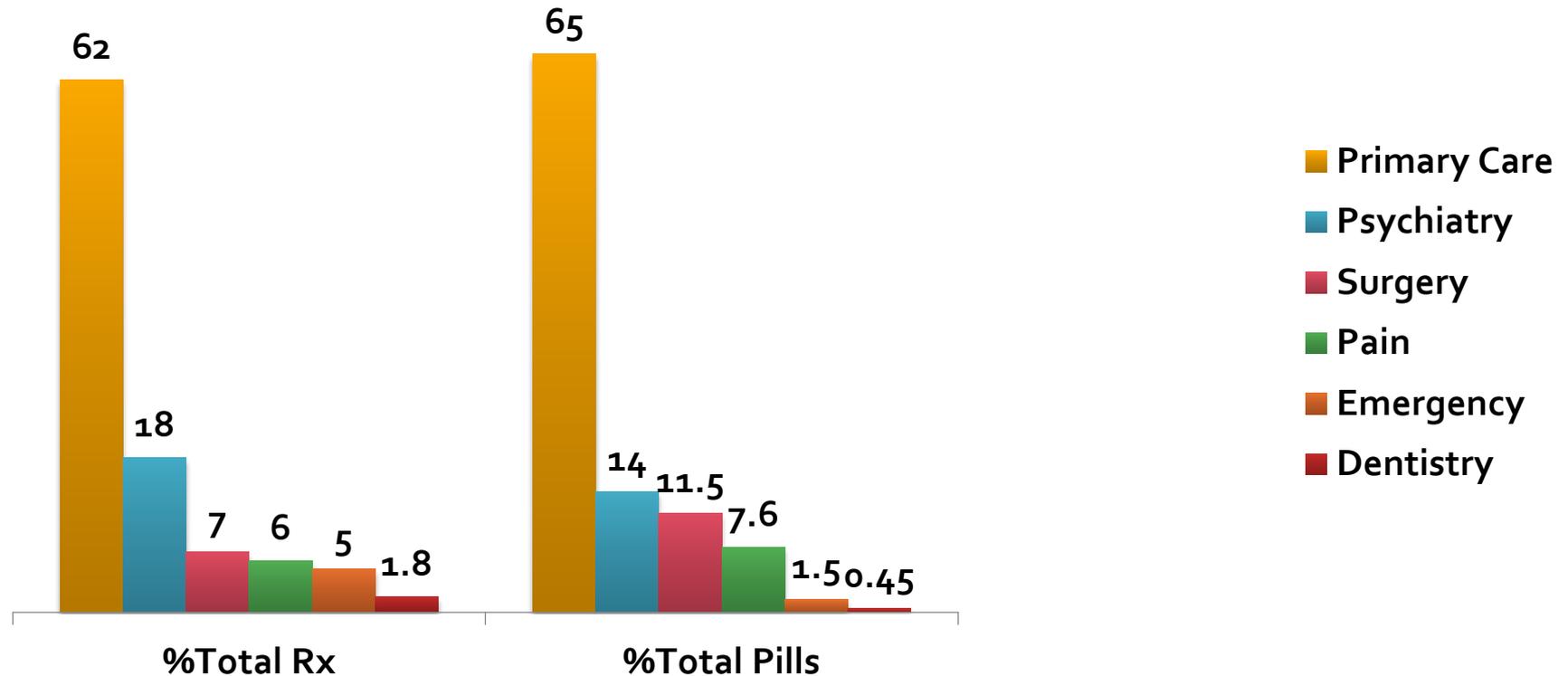
Where do Doctor Shoppers Go?



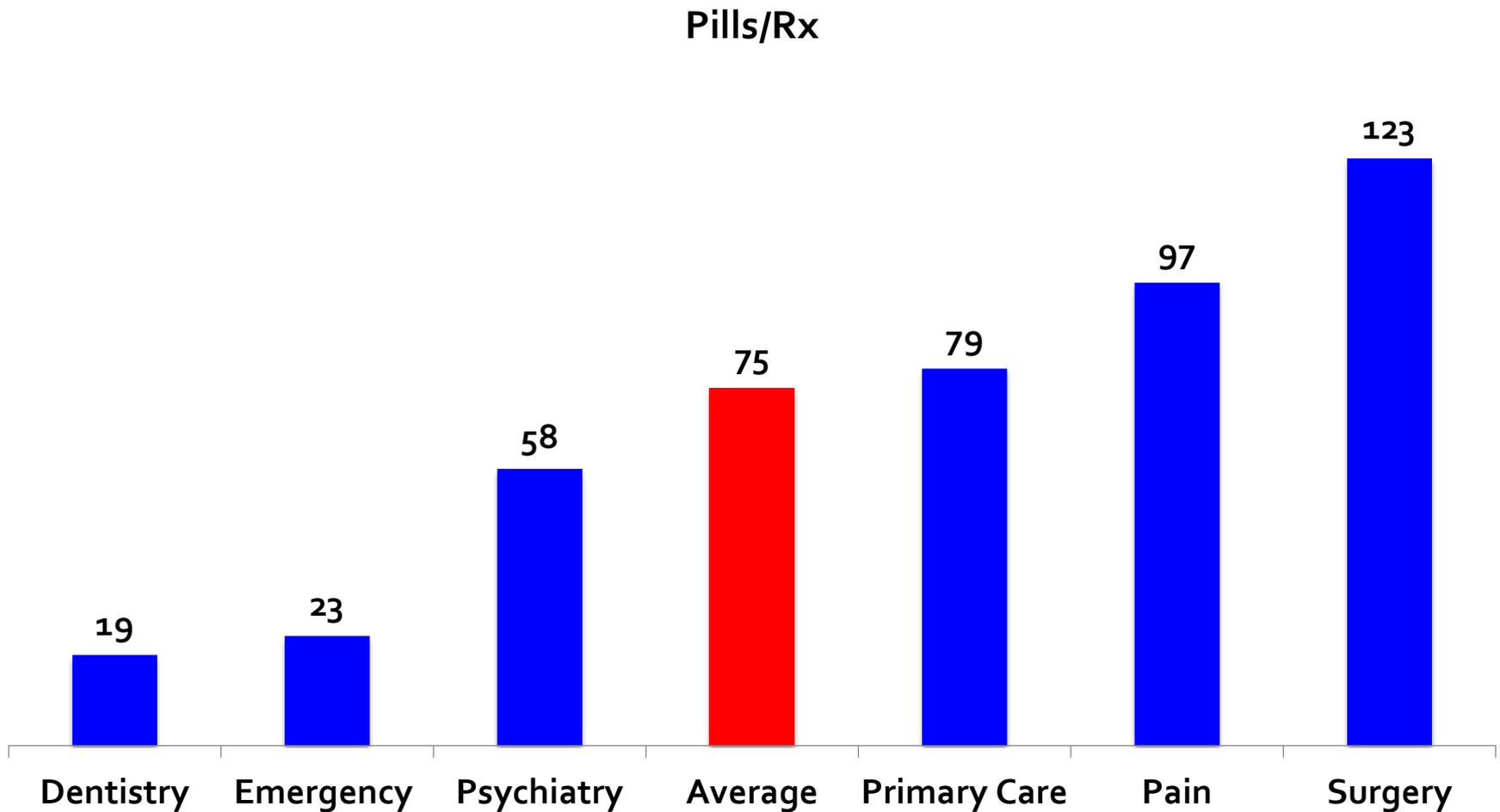
- Neurology 17.1 Rx per Doctor Shopper v 3.1
- Urology 100% to Doctor Shoppers

Who is Prescribing the Most?

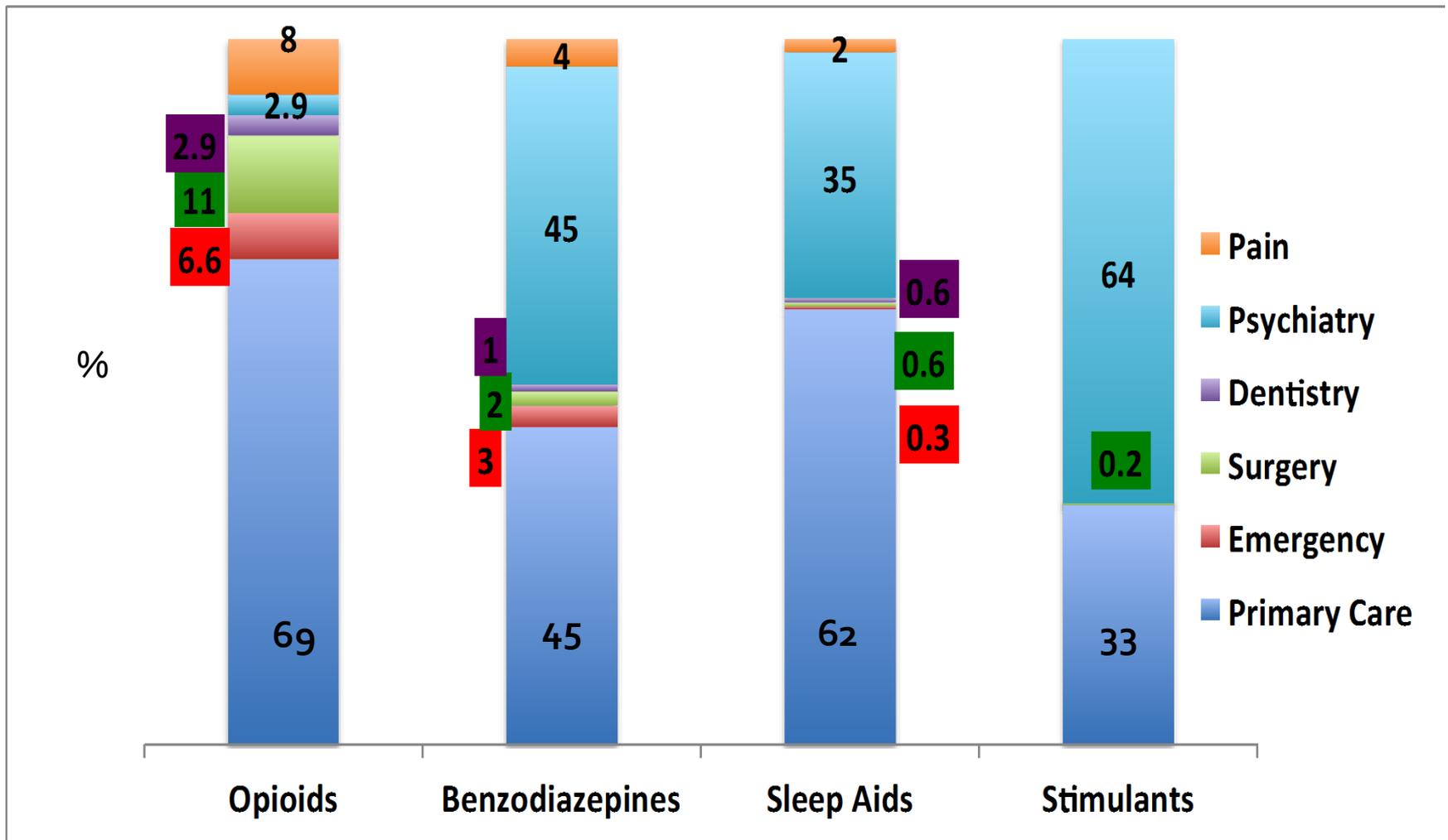
Rx by Specialty



How many pills do you need?

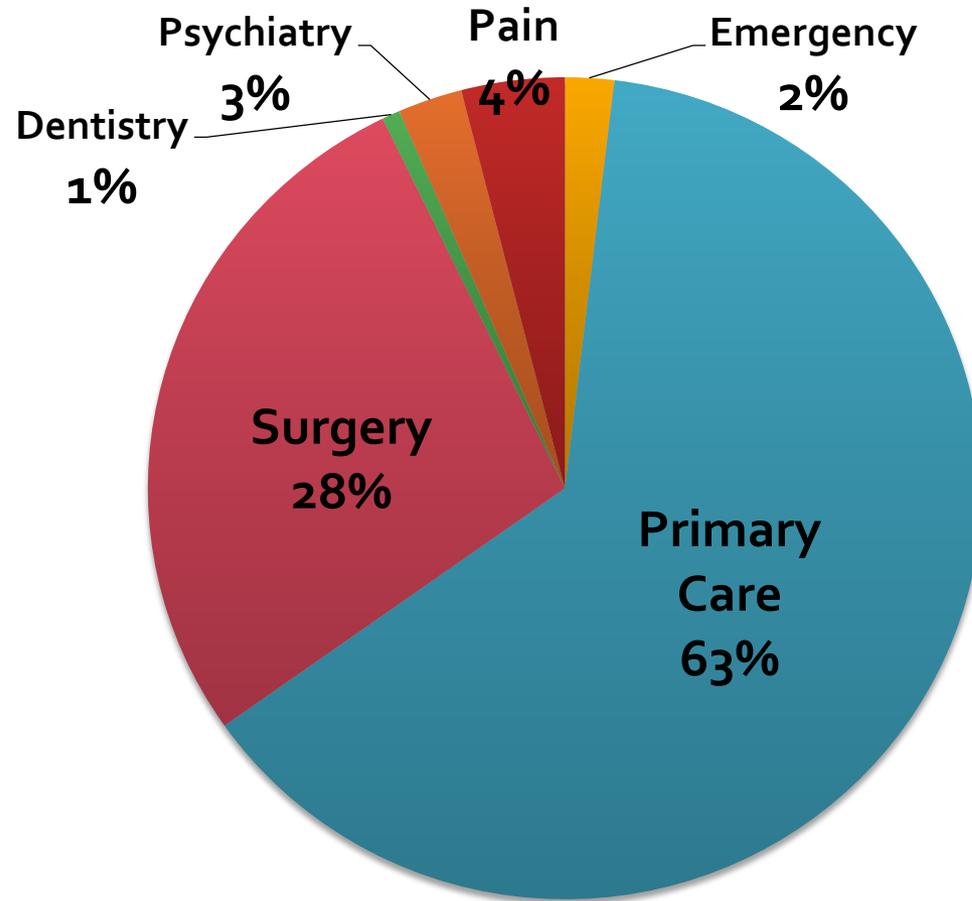


Specialists and Medication Types



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: Feb 27, 1956
 Date Range: Between Feb 7, 2012 and Feb 7, 2013
 Number of Prescriptions: 23

Patient 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	RS0200586	_____	875313
			F	04/20/2012	ACETAMINOPHEN/ CODINE	TAB	300 MG-30 MG	40	PHY46897	WALGREENS NO 07869	FR2197292	_____	878609
			F	04/20/2012	LORAZEPAM	TAB	1 MG	42	PHY46897	WALGREENS NO 07869	FR2197292	_____	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	RS0613732	_____	904772
			F	06/15/2012	LORAZEPAM	TAB	1 MG	20	PHY46897	WALGREENS NO 07869	RS0613732	_____	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	RM5414014	_____	939278
			F	08/24/2012	LORAZEPAM	TAB	1 MG	20	PHY46897	WALGREENS NO 07869	RM5414014	_____	939276
			F	09/17/2012	APAP/ OXYCODONE	TAB	325 MG-5 MG	20	PHY46897	WALGREENS NO 07869	RC6618612	_____	951090
			F	09/17/2012	LORAZEPAM	TAB	1 MG	6	PHY46897	WALGREENS NO 07869	RC6618612	_____	951091
			F	09/24/2012	METHADONE HYDROCHLORIDE	TAB	10 MG	120	PHY43228	SHARP REES STEALY PHARMACY #5	BL3094810	_____	779523
			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

*** 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 II, Schedule III, and Schedule IV prescription information that is received from California Pharmacies and is therefore only as accurate as the information provided by the Pharmacies.

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

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

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

[Skip to content](#)

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

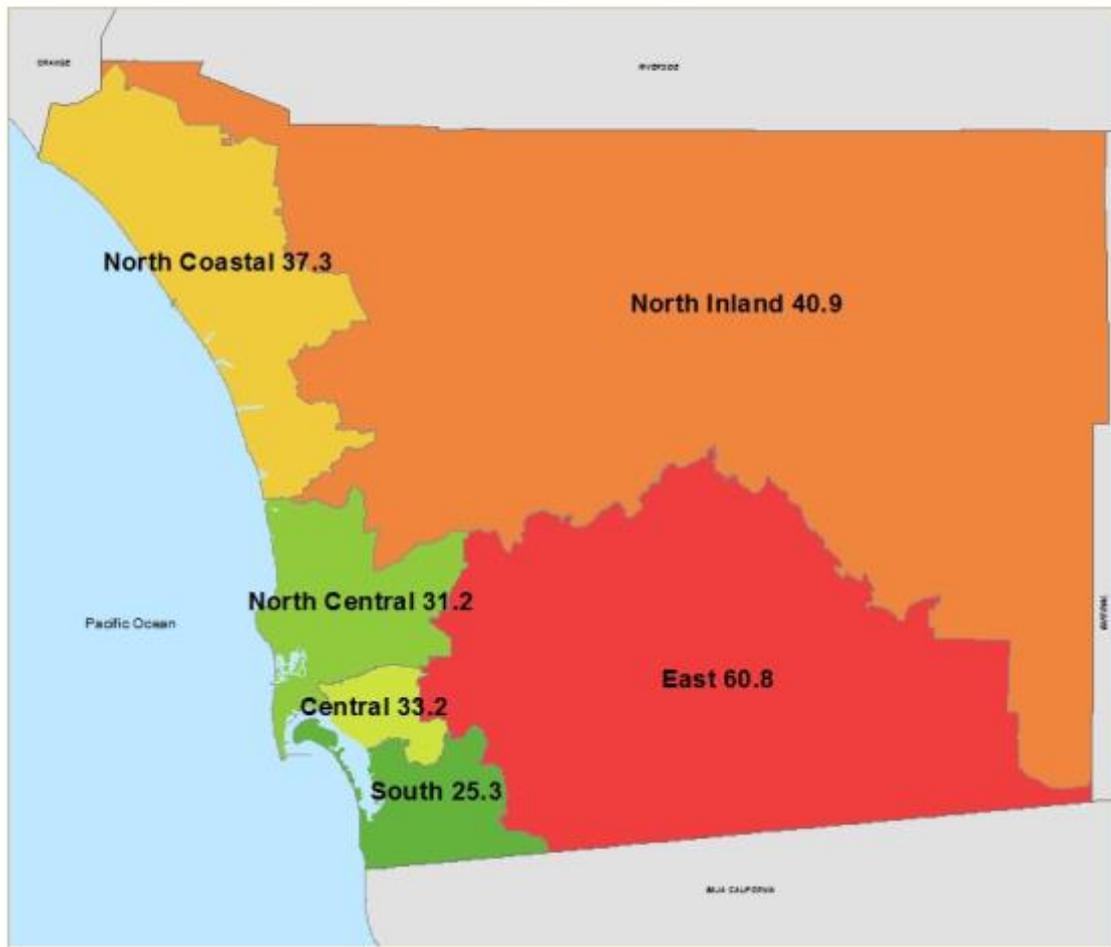


PDA Report Card



3.8
4.8

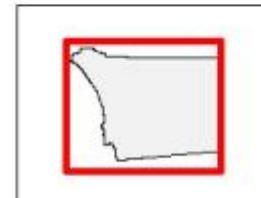
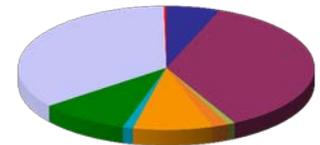
San Diego CURES Map



Opioid Pills Per Person
County of San Diego
2012

San Diego County Regions

- South
- North Central
- Central
- North Coastal
- North Inland
- East



Map Date: 2014
 Contact: Joshua Smith or Leslie Kay,
 County of San Diego Emergency Medical Services
 619.235.8429
 NAD_1983_StatePlane_California_VL_FIPS_4046_Feet
 S:\MPL\America_1983_Feet_V8



Emergency and Urgent Care Guidelines

SAFE PAIN MEDICINE 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.

1. We look for and treat emergencies. We use our best judgment when treating pain. These recommendations follow legal and ethical advice.

2. 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.

3. If pain prescriptions are needed for pain, we can only give you a small amount.

4. We do not refill stolen prescriptions. We do not refill lost prescriptions. If your prescription is stolen, please contact the police.

5. We do not prescribe long acting pain medicines: OxyContin, MSContin, Dilaudid, Fentanyl (Duragesic), Methadone, Opana ER, Exalgo, and others.

6. We do not provide missing doses of Subutex, Suboxone, or Methadone.

7. We do not usually give shots for flare-ups of chronic pain. Medicines taken by mouth may be offered instead.

8. 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.

9. 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 tracks narcotic and other controlled substance prescriptions.

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

1-888-724-7240

for confidential referral and treatment.

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



HOSPITAL ASSOCIATION
of San Diego and Imperial Counties



Medication Agreement

PATIENT MEDICATION AGREEMENT for Painkillers, Anxiety Medication, Stimulants, and all Controlled Substances

You are being prescribed a medicine that has many risks. The medicine also has special laws that the doctor and patient must follow.

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

- 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 or feel you need more.
- The dangers of the medicine are greater with anything that makes you sleepy. Mixing your medicine with alcohol, street drugs, sleeping pills, or other drugs can make you sick or die.
- Do not drive a car or do dangerous activities if you are not fully alert when on these medicines.
- 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 California tracks your prescriptions.
- If your provider feels that your medicine is not helping, the medicine will be stopped. You will be treated with other methods.



One San Diego



One San Diego

SAFE PAIN MEDICINE PRESCRIBING IN EMERGENCY DEPARTMENTS

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1

- One Provider-One Pharmacy

2

- CURES

3

- Medication Agreement

4

- Benzodiazepines + Opioids

5

- Emergency Department Guidelines

Medical Examiner Feedback



Pediatric Anticipatory Guidelines



**SAFETY
FIRST**

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

Two Populations

Prevention



Weaning



How to Say No Nicely

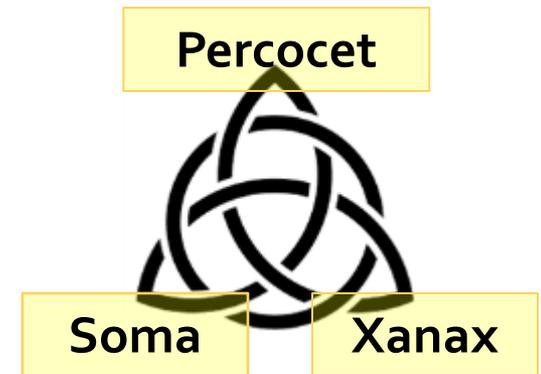


- Don't be the Candy Man
- Don't be the Candy Land



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 reverse 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

Subtract Pills in refills

- Pain Clinics

Methadone – only by primary care

- Community Health Group, San Diego

Health Plans

- “One Doctor, One Pharmacy”
- Formulary Restrictions
- Prior Authorization



References

- Lev, R et al “Methadone 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



San Diego County Medical Society
"Physicians United for a Healthy San Diego"



California Medical Association

[PHYSICIAN QUICKLINKS](#) [MEET OUR PHYSICIANS](#) [MEMBERSHIP FAQS](#) [PARTNER ORGANIZATIONS](#)

San Diego Safe Prescribing:

- Introduction
- Patient and Community Resources
- Patient Pain Agreement
- Safe Pain Medication Prescribing in Emergency Departments
- Provider Guidelines
- Educational Materials
- Relevant Articles

SanDiegoRxAbuseTaskForce.Org



**San Diego County
Prescription Drug Abuse Task Force**
Info@SanDiegoRxAbuseTaskForce.org



Who We Are	Commonly Misused Medications	Addiction Help	Resources	Medication Safety & Disposal	Teens	Local Statistics	Doctor's Desk	Legislation	Newsroom	Links
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Making Healthy Choices about Prescription Drugs

PDATF Web Videos Dave Roberts 042014