

# San Francisco Health Service System

## Opioid Analytic

## Introduction

Opioid epidemic has in July, 2017 become FDA's biggest national crisis –CDC Director Thomas Friedman says "America is awash in opioids, urgent action is critical".

The Castlight Health report 'The Opioid Crisis in America's Workforce' reveals the following insights:

- Baby Boomers are 4 times likely to misuse Opioids as Millennials. It is important to understand an employers insurance population to understand Opioid epidemic. Older individuals more likely to receive surgeries hence exposure to pain medications and opioids. One way to reduce cost is to target intervention towards this population
- Opioid misusers cost employers twice as much in healthcare , ie, \$19,450.00 compared to non-misusers at \$ 10,853.00 in 2015. Increased ER visits and hospitalization was also responsible for the difference in spending
- 32% of Opioid prescriptions are misused
- 4.5% of individuals who received Opioid prescriptions are misusers
- 40% of Opioid prescriptions spending attributed to misusers
- Joint, Neck and Abdominal pains are the three top conditions where opioid misuse is most prevalent.

Against this backdrop of a national epidemic, the question was posed as to whether these characterizations were also true of the SFHSS population

## Definitions and Glossary

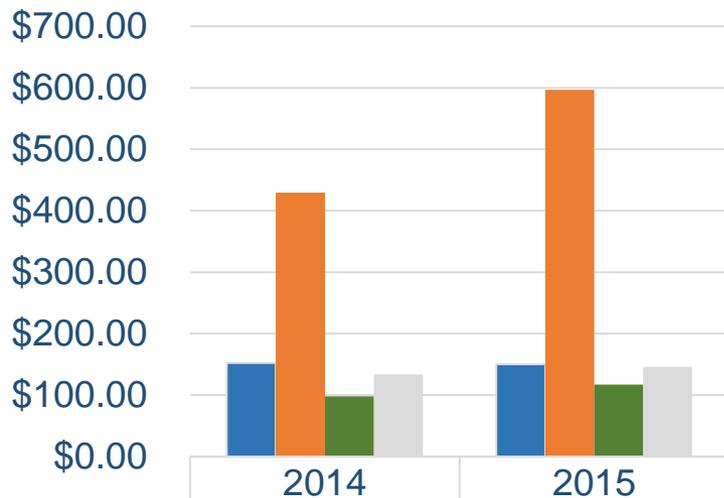
- Opioid recipients are defined using the following logic: Drugs classified by the DEA as Schedule II, Therapeutic class = Opioid Agonists, Partial Opioid Agonists
- Age in years greater than 18
- Patients with an episode of Cancer, Chemotherapy or Benign Tumors have been excluded. HIV episodes have been included
- COBRA patients not included
- Cost data for Medicare Retirees has not been included because Kaiser Pharmacy Financials are not submitted on Medicare Retiree encounters
- Continuously Enrolled members are defined as enrolled for all 12 months of 2014/2015
- Opioid Misuse is defined using a set list of “Opioid Misuse” ICD 9 and ICD 10 Diagnosis Codes
- Net payment data has been used as it reflects HSS Plan Payments, whereas Allowed amount reflects total cost of care
- At the time of the study the 2016 plan year/run out had not yet completed so this study compares 2014 to 2015
- 450 days/supply per year is the definition being utilized for a pattern of abuse and is considered a high threshold in order to minimize over-reporting.

## 2015 Share of Population and Spending

Plan Group	Employee Status	Members Average	Recipients with Opiates	% of Total Members	Total Rx Payments	Opiates Rx Payments	% of Total Payments
Blue Shield	Active	28,158	3267	12%	\$42,539,699	\$490,422	1%
	Early Retiree	1,850	282	15%	\$4,203,173	\$122,256	3%
	Medicare Eligible Retiree	6,431	1,079	17%	\$20,855,041	\$368,858	2%
City Plan	Active	1168	202	17%	\$4,113,434	\$120,557	3%
	Early Retiree	463	100	22%	\$1,580,962	\$49,069	3%
	Medicare Eligible Retiree	5,789	1,143	20%	\$18,814,636	\$981,081	5%
Kaiser	Active	36,932	3651	10%	\$30,422,598	\$427,846	1%
	Early Retiree	1,785	242	14%	\$2,807,201	\$31,053	1%
	Medicare Eligible Retiree	10,189	1,519	15%	-	-	-
Total	Active	73,092	7138	10%	\$77,209,648	\$1,040,091	1%
	Early Retiree	5,637	624	11%	\$8,593,756	\$202,377	2%
	Medicare Eligible Retiree	23,854	3,744	16%	-	-	-

- ❑ Recipients with opioid prescriptions account for 11% of the total SFHSS population
- ❑ Total RX payments excluding the Kaiser Medicare spend amounted to over \$134M in 2015 with \$2.74M attributable to Opioids
- ❑ On average, 2% of the RX spend is for Opioids with the City Plan Medicare Retirees trending much higher at 5%

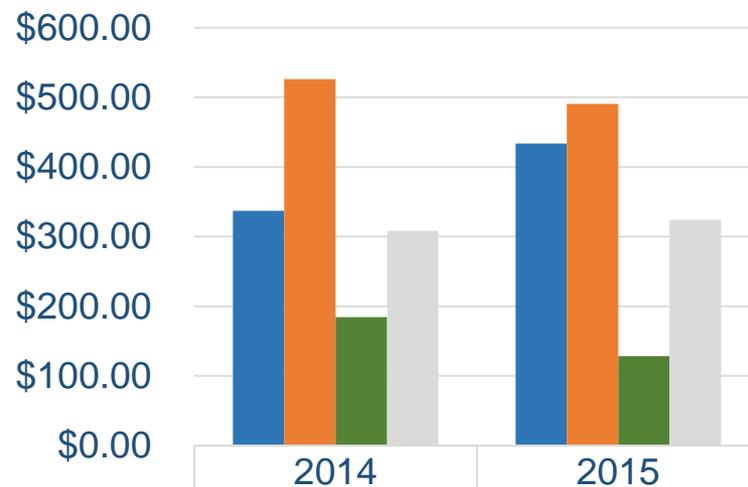
## ACTIVE



■ Blue Shield	\$152.15	\$150.11
■ City Plan	\$429.26	\$596.81
■ Kaiser	\$97.97	\$117.19
■ Total (Active, Early Retiree Members) in all Plan Groups	\$133.59	\$145.75

□ Opioid drug costs per recipient showed a 9% increase from 2014 to 2015

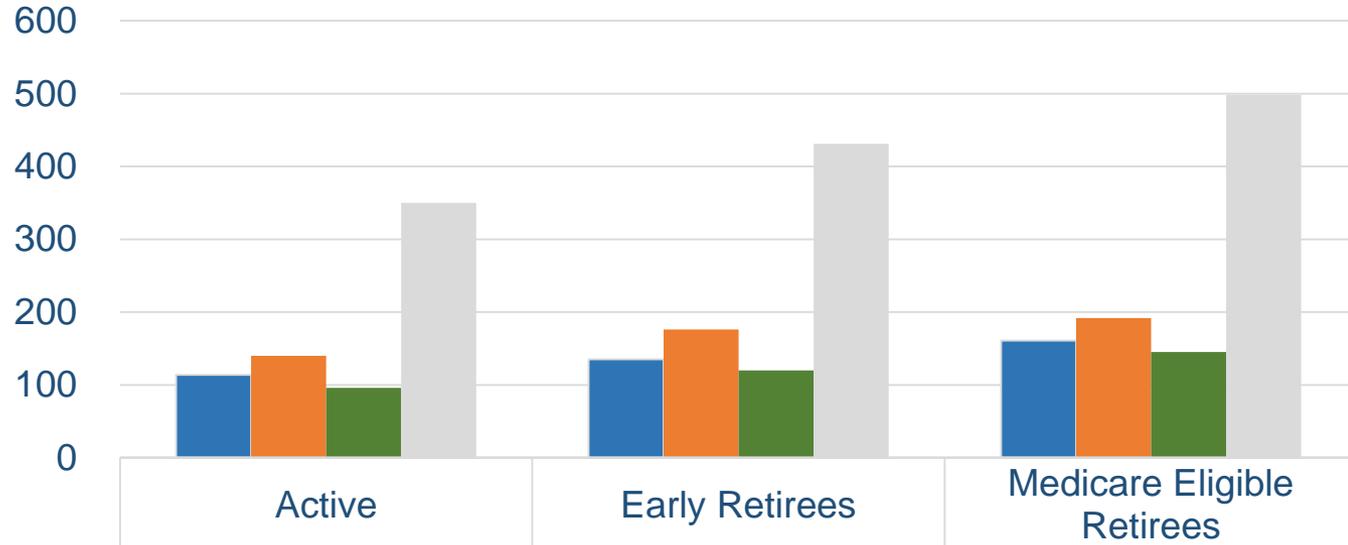
## EARLY RETIREE



■ Blue Shield	\$337.02	\$433.53
■ City Plan	\$526.03	\$490.69
■ Kaiser	\$184.17	\$128.32
■ Total (Active, Early Retiree Members) in all Plan Groups	\$308.29	\$324.32

□ Opioid drug costs per recipient showed a 5% increase from 2014 to 2015

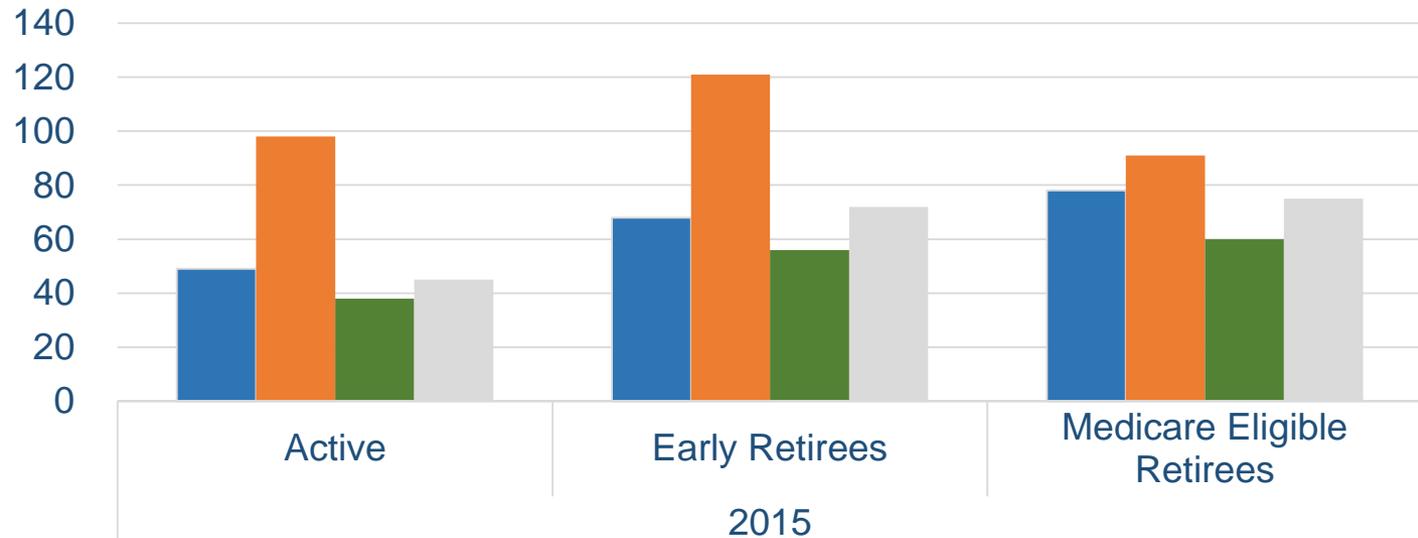
### Continuously Enrolled Opioid Recipients per 1000



	2015		
	Active	Early Retirees	Medicare Eligible Retirees
■ Blue Shield	114	135	161
■ City Plan	140	176	192
■ Kaiser	96	120	145
■ Total(Active, Early Retiree Members in all Plan Groups)	350	431	498

- In 2015, City Plan Medicare Eligible Retiree and Early Retiree members accounted for the highest number of recipients per 1000 with an opioid prescription at 192 and 176 recipients per 1000 respectively
- Blue Shield Medicare Eligible Retiree members accounted for the second highest number of recipients per 1000 with an opioid prescription at 161 recipients per 1000
- Kaiser Active members had the lowest number of recipients per 1000 with an opioid prescription at 96 recipients per 1000

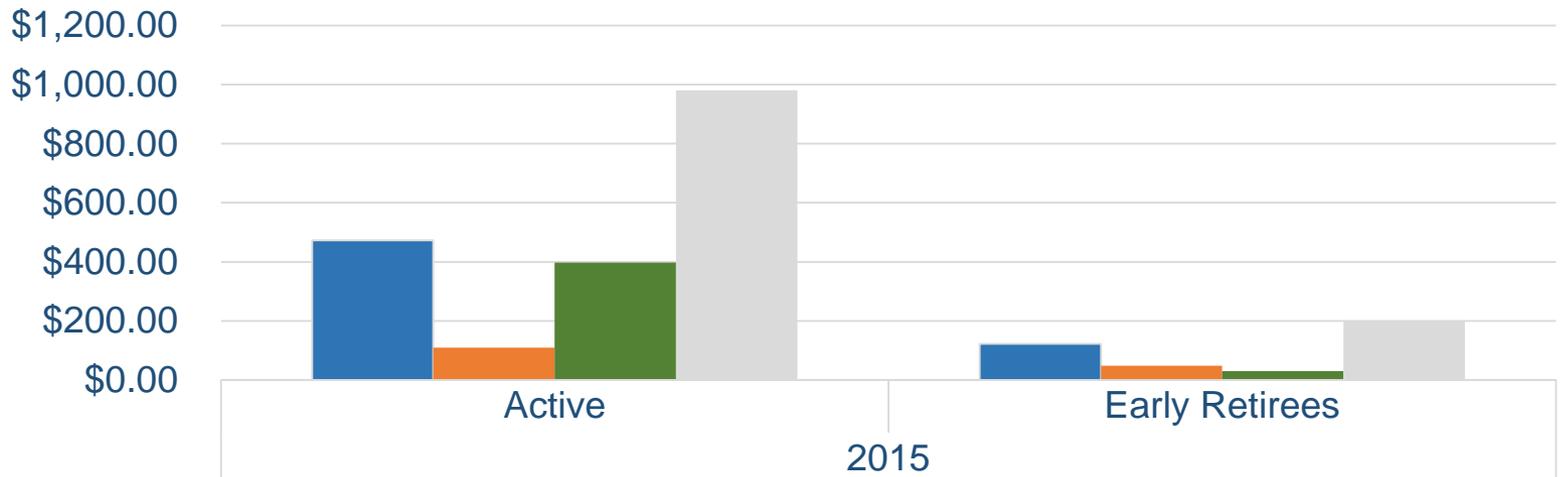
### Days Supply per Continuously Enrolled OpioiD Recipient



	Active	Early Retirees	Medicare Eligible Retirees
Blue Shield	49	68	78
City Plan	98	121	91
Kaiser	38	56	60
Total (Active, Early Retiree Members and Medicare Eligible Retirees) in all Plan Groups	45	72	75

- Across Plans, Early Retiree and Medicare Eligible Retiree, have the highest quantity of days supply per opioiD recipient which is consistent with national trends
- City Plan Early Retiree members have the highest number of days supply per opioiD recipient at 121 days supply

## Net Payment Rx for Continuously Enrolled Opioid Recipients (in 1000s)



	Active	Early Retirees
Blue Shield	\$472.32	\$122.16
City Plan	\$110.18	\$48.75
Kaiser	\$397.71	\$29.81
Total (Active, Early Retiree Members) in all Plan Groups	\$980.49	\$200.72

- As indicated earlier Kaiser Medicare financials are not reported
- In 2015, the Net Payment for City Plan Medicare Retirees for opioid RX was \$979.32
- In 2015, the Net Payment for Blue Shield Medicare Retirees for opioid RX was \$364.26.
- For both Kaiser and Blue Shield the active population is much larger than the early and Medicare retiree population which accounts for the larger net payments

PLAN	2014				2015			
	Scripts Per 1000	Scripts Per Pat	Days Supply Per Pat	Days Supply Per Script	Scripts Per 1000	Scripts Per Pat	Days Supply Per Pat	Days Supply Per Script
Blue Shield	510.44	3.5	58.01	16.59	418.4	3.27	58.06	17.75
City Plan	1,015.14	4.49	93.89	20.9	828.4	4.32	94.44	21.88
Kaiser	257.49	2.16	39.42	18.27	208.9	1.85	44.67	24.13
<b>TOTAL</b>	<b>425.55</b>	<b>3.05</b>	<b>55.01</b>	<b>18.06</b>	<b>344.8</b>	<b>2.74</b>	<b>56.59</b>	<b>20.66</b>

- While Allowed Amounts per script are not provided here because Kaiser Medicare financials are not available, observable in the data was that the Allowed Amount per script Rx is trending upwards by 14%
- The patients of the City Plan are getting a much larger days supply than the rest of the population in 2015 (63 % higher than Blue Shield and 66 % higher than the entire population)

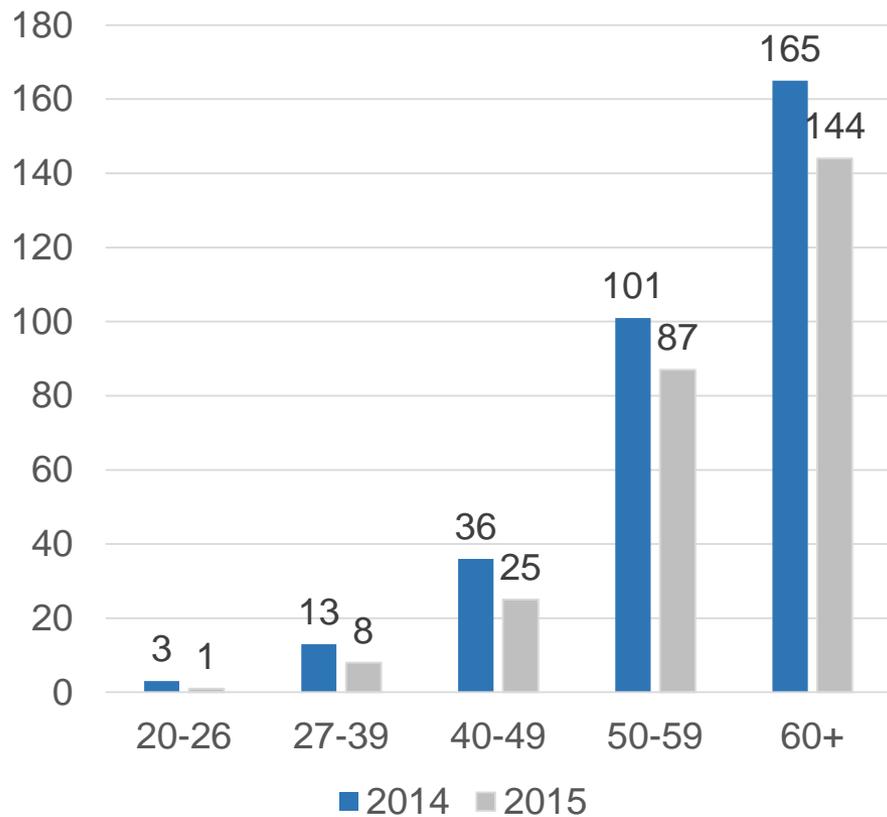
Opioid Recipients with > 450 Days Supply		
	2014	2015
Patient Count	303	253
% of Total Patients with any Opioid days supply	2.30%	2.10%
% of Total Opioid Net Pay	66%	61%
Days Supply / Patient	689	716

Continuously Enrolled Opioid Recipients with > 450 Days Supply	
	2015
CE Patient Count	242
% of Total CE Patients with any Opioid days supply	2.20%
% of Total CE Opioid Net Pay	63%
Days Supply / CE Patient	723

- A pattern of abuse was established at 450 days supply / year, and is considered to be a high threshold in order to minimize over reporting of abuse
- Of the 253 potential abusers in 2015, 144 had greater than 450 days supply for an opioid in 2014 as well

- The most common scripts for these members are for Hydrocodone (Vicodin), Morphine, Oxycodone (Percocet), and Oxycontin

## Patients by Age-band



Over the last 2 years, 50-60% of potential abusers were over the age of 50 which is consistent with the Castlight Health report

## Risk Scores

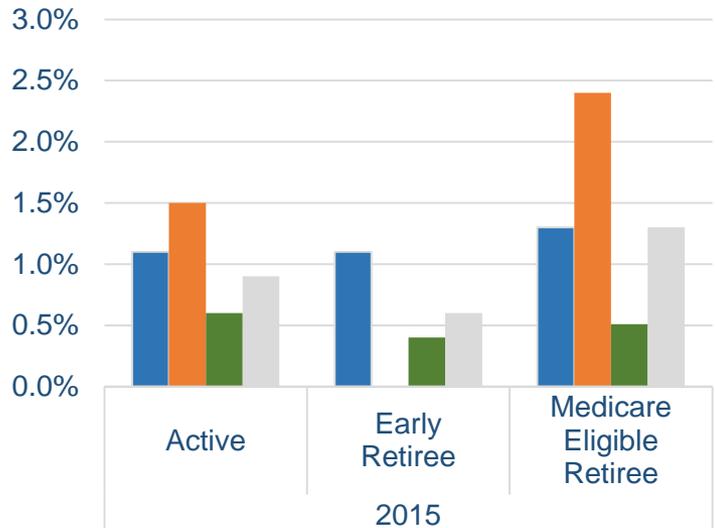
2015	
	Relative Risk Score Concurrent
Patients on Opioids	1.14
Patients on Opioids > 450 days	4.25

The risk score for opiate users with greater than 450 days supply for an opioid at 4.25 is significantly larger than the risk score for all opiate users at 1.14.

Non-Cancer Conditions using an Opioid to Treat Pain	Opioid Recipients with > 450 Days Supply	Continuously Enrolled Opioid Recipients with > 450 Days Supply
Osteoarthritis, Except Spine	75	73
Osteoarthritis, Lumbar Spine	72	67
Other Spinal and Back Disorders, Low Back	64	62
Essential Hypertension, Chronic Maintenance	57	54
Other Arthropathies, Bone and Joint Disorders	56	53
Depression	40	37
Bursitis	39	39
Intervertebral Disc Disorders, Low Back	38	37
Diabetes Mellitus Type 2 & Unspec Type Maintenance	35	35
Oth Inflamm and Infect of Skin and Subcutaneous Tis	29	28
Osteoarthritis, Cervical Spine	28	27
Headache	25	25
Other Ear, Nose, and Throat Disorders	23	20
Human Immunodeficiency Virus Type I (HIV)	5	5

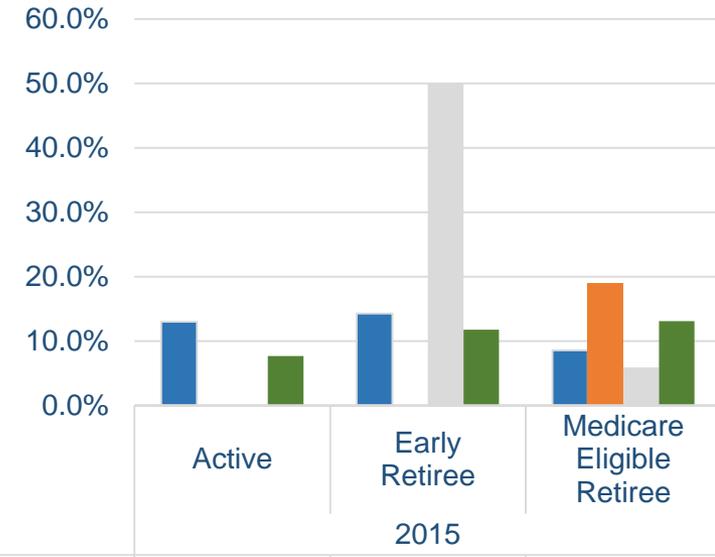
- 30% of the continuously enrolled potential abusers in 2015 had an episode for Osteoarthritis, Except Spine and 26% experienced an episode related to low back disorders
- Joint pain is consistent with the findings from the Castlight Health Report

**% of OpioiD Recipients with any days supply and an OpioiD Misuse Diagnosis in 2015**



	Active	Early Retiree	Medicare Eligible Retiree
Blue Shield	1.1%	1.1%	1.3%
City Plan	1.5%	0.0%	2.4%
Kaiser	0.6%	0.4%	0.5%
Total(Active, Early Retiree and Medicare Eligible Retiree Members in all Plan Groups)	0.9%	0.6%	1.3%

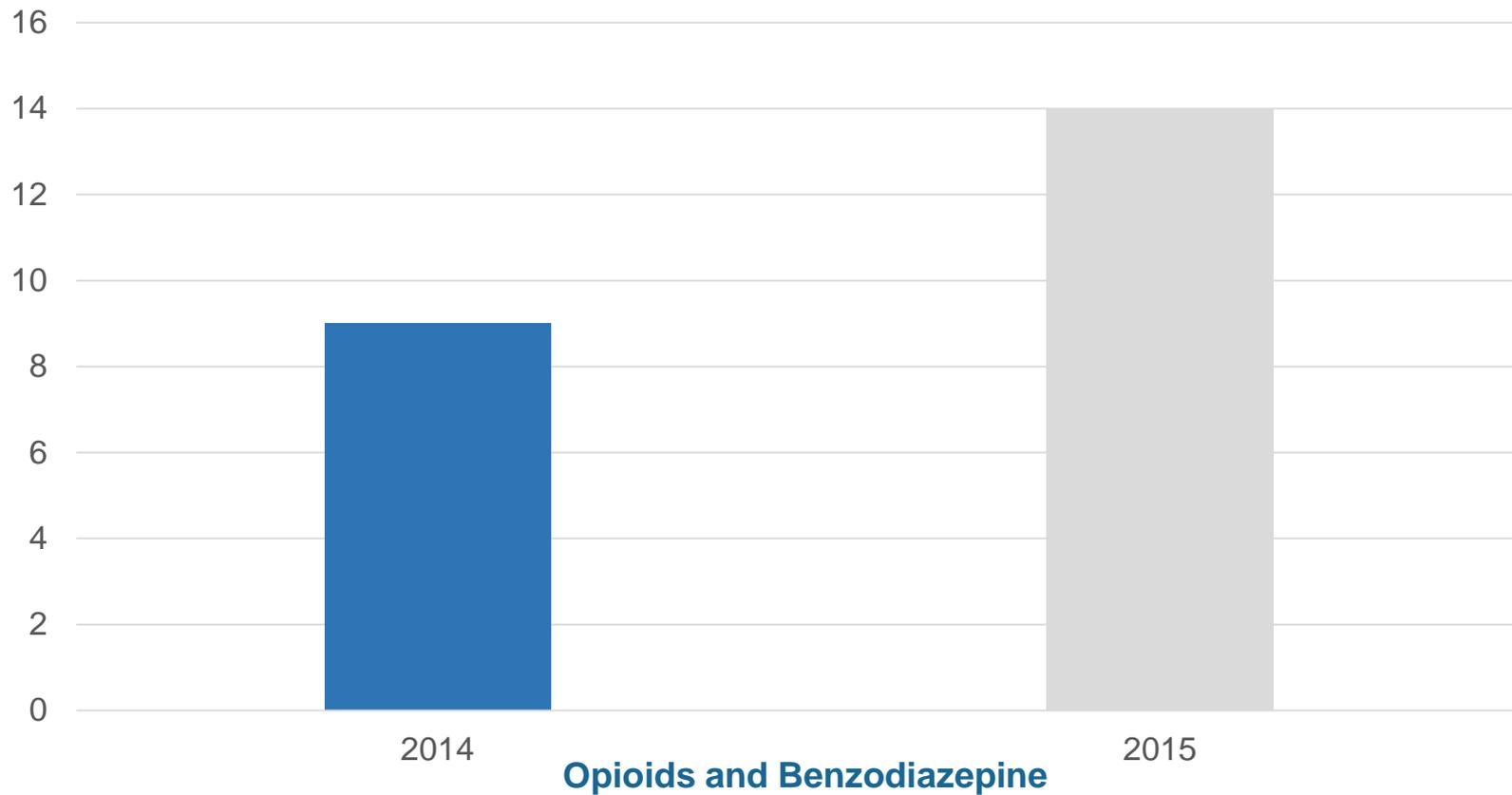
**% of OpioiD Recipients with >450 Days Supply and an OpioiD Misuse Diagnosis in 2015**



	Active	Early Retiree	Medicare Eligible Retiree
Blue Shield	13.0%	14.3%	8.6%
City Plan	0.0%	0.0%	19.1%
Kaiser	0.0%	50.0%	5.9%
Total(Active, Early Retiree and Medicare Eligible Retiree Members in all Plan Groups)	7.7%	11.8%	13.1%

- ❖ Overall, 123 recipients or 1.0% of the 12,128 Health Service System recipients in all plan groups with an opioiD prescription with any days supply amount also have a medical claim associated with opioiD misuse
- ❖ 26 recipients or 10.3% of Health Service System recipients in all plan groups with an opioiD prescription with greater than 450 days supply amount also have a medical claim associated with opioiD misuse

## Opioid recipients with prescription fills for various medications within 30 days of discharge for an opioid misuse hospitalization



- ❑ In 2015, 14 patients were prescribed Opioids and Benzodiazepine within 30 days of discharge for an opioid related hospitalization. Use of these two drugs together can lead to depressed respiration and possibly death.

## Recommendations / Next Steps

- SFHSS will be implementing new performance guarantees with Kaiser and Blue Shield related to Opioid use
  - Measure members with 100+ morphine milligram equivalents
  - Measure number of new prescriptions that are over 30 days
- Include pain management technique suggestions as part of a wellness coaching benefit or SFHSS Well-Being programs
- Ensure SFHSS members have access to programs to manage pain, addiction and substance abuse
- Promote safe storage and safe disposal of unused medication → 2016 JAMA survey\* indicated 66% of patients keep left-over pills after treatment and 20% of patients share their medication with others (Kaiser has drop off in their pharmacy)
- Consider expanded opioid analytic that looks at all Class II drugs, not just the opioids
- Determine appropriateness of a lock in policy, which requires that individuals with patterns of abuse and/or doctor-shopping to use a single pharmacy for prescription opioids
- Utilize the APCD to identify possible fraud, waste and abuse
- Require providers to check the California Prescription Drug Monitoring Database (Cures 2.0) (Blue Shield Narcotic Safety initiative included reviewing CA Cures Patient Reports)
- Health plans to present in October on steps they are taking