Women of Childbearing Age and Opioids

Preliminary Data: SC Medicaid Program September 12, 2012

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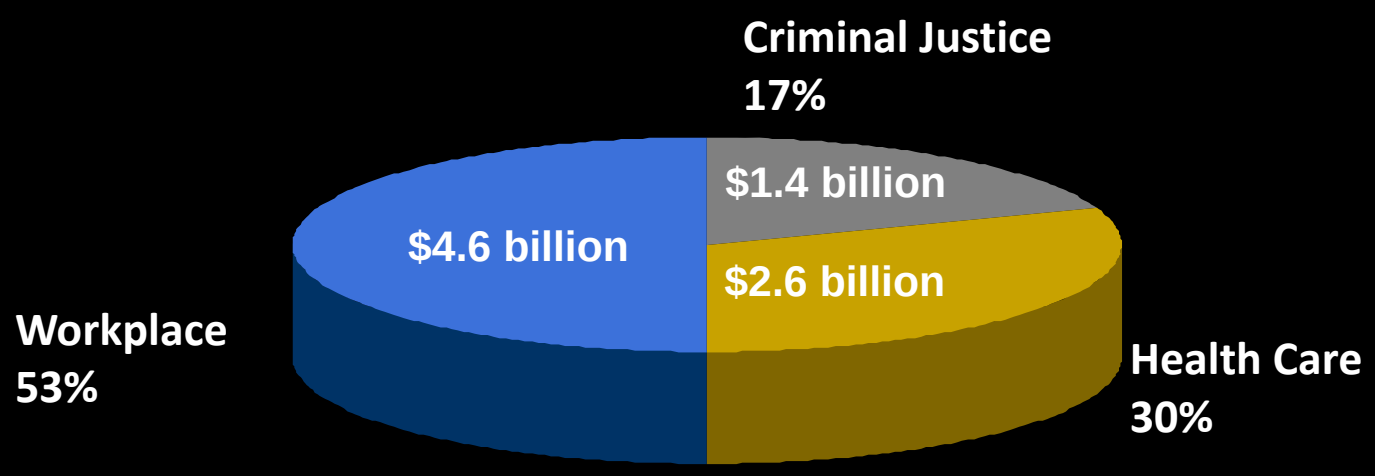
DISCLAIMERS

Data Analysis

- The Chronic Opioid Therapy Medication Use Evaluation (MUE) Tool was used for the analysis of retrospective CY 2008-2011 SC Medicaid Claims data.
- SC Medicaid data compared to a national Medicaid data reference set of 600,000 recipients.
- I have a research license to use the MUE Tool. The use of MUE Tool does not create a financial or conflict of interest with Janssen Pharmaceutical.
- Permission has been granted by the SC Department of Health and Human Services for use of the Medicaid data.

Prescription Medication: Opioids Misuse National Trends

Prescription Opioid Abuse Is a Significant and Costly Public Health Problem



Total cost of prescription opioid abuse in the United States was $8.6 billion in 2001 and continues to grow.

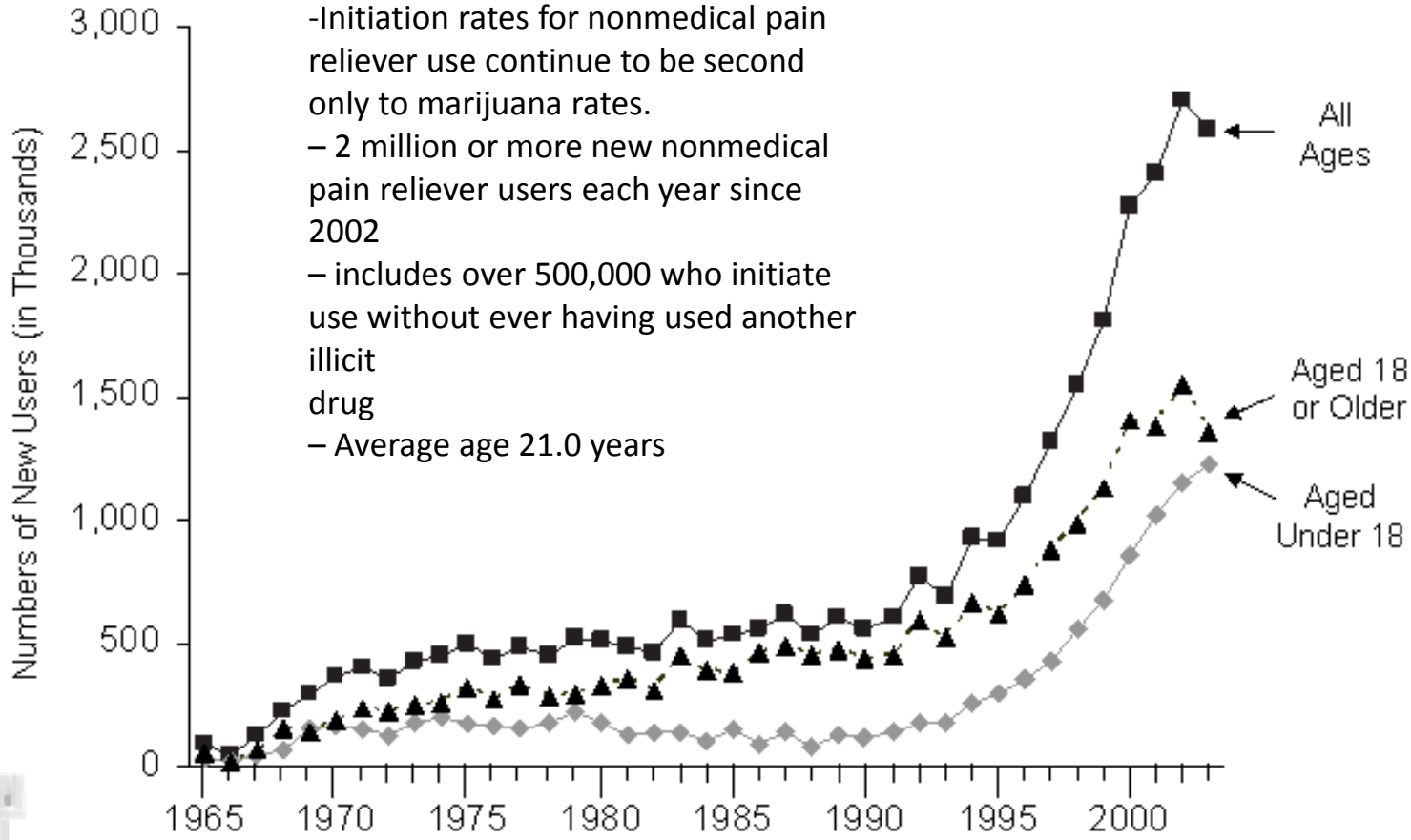
Birnbaum HG et al. *Clin J Pain*. 2006;22:667-676.

National Trends

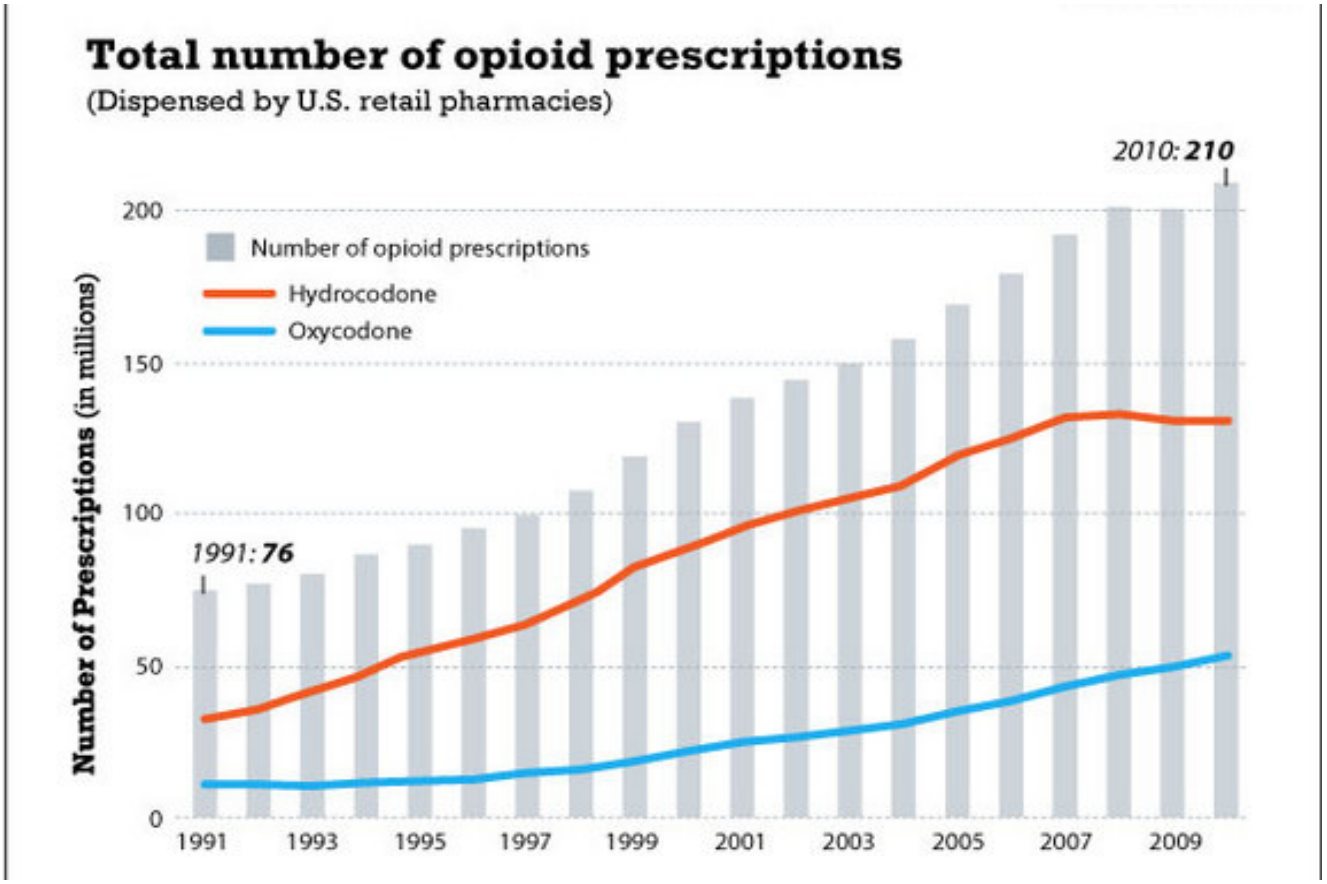
- The number of prescriptions filled for opioid pain relievers—some of the most powerful medications available—has increased dramatically in recent years.
- From 1997 to 2007, the milligram per person use of prescription opioids in the U.S. increased from 74 milligrams to 369 milligrams, an increase of 402 percent.
  (Manchikanti L, Fellow B, Ailinani H, Pampati V. Therapeutic Use, Abuse, and Nonmedical Use of Opioids: A Ten-Year Perspective. *Pain Physician*. 13:401-435. 2010.)
- In addition, in 2000, retail pharmacies dispensed 174 million prescriptions for opioids; by 2009, 257 million prescriptions were dispensed, an increase of 48 percent.
  (Based on data from SDI, Vector One: National. Years 2000-2009. Extracted June 2010. Available at http://www.fda.gov/downloads/AdvisoryCommittees/Co/UCM217510.pdf)
- Further, opiate overdoses, once almost always due to heroin use, are now increasingly due to abuse of prescription painkillers. (*Unintentional Drug Poisoning in the United States*, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, July 2010.)

Annual Numbers of New Nonmedical Users of Pain Relievers, by Age at Initiation: 1965-2003, SAMHSA

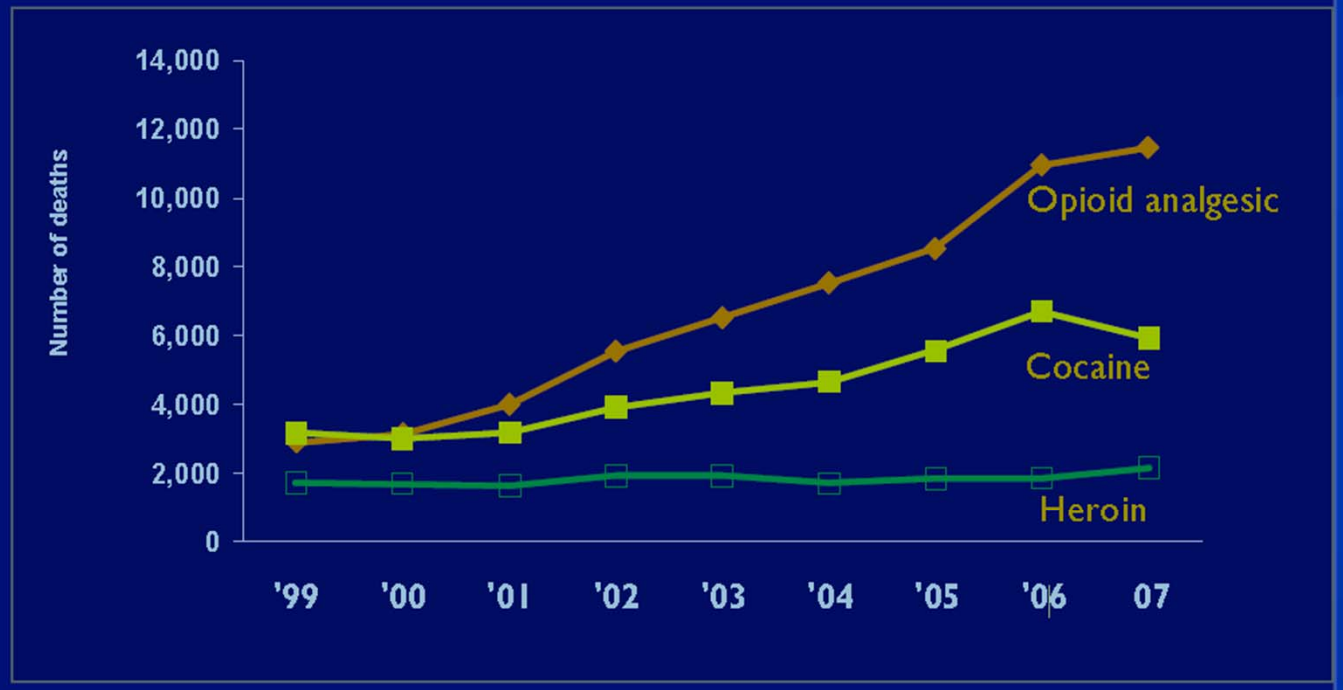
-Initiation rates for nonmedical pain reliever use continue to be second only to marijuana rates.
– 2 million or more new nonmedical pain reliever users each year since 2002
– includes over 500,000 who initiate use without ever having used another illicit
drug
– Average age 21.0 years



National Opioids Prescription Trends



Unintentional overdose deaths involving opioid analgesics now exceed the sum of deaths involving heroin or cocaine



Source: National Vital Statistics system, multiple cause of death dataset

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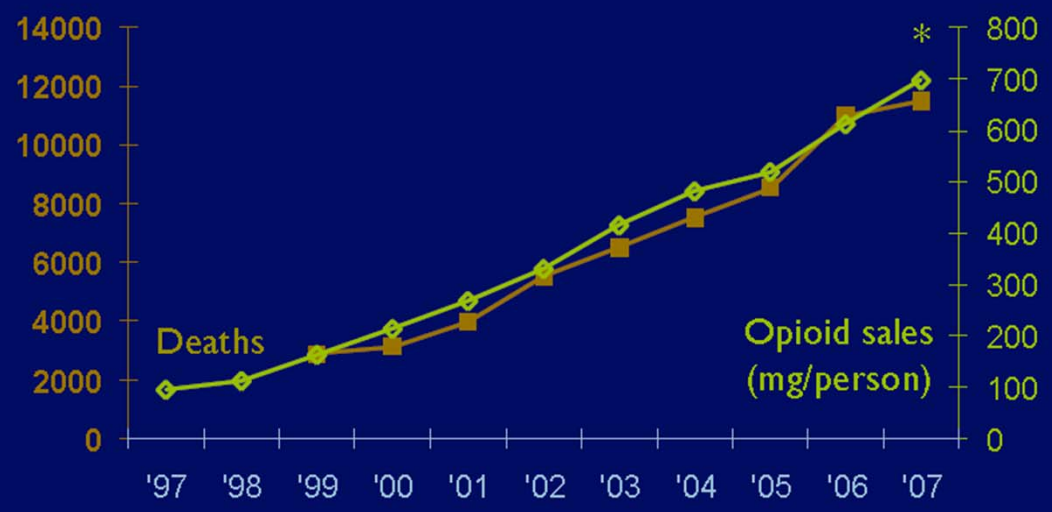
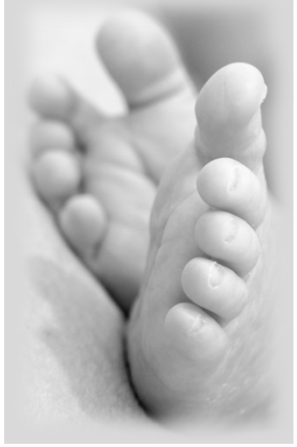
Unintentional overdose deaths involving opioid analgesics parallel per capita sales of opioid analgesics in morphine equivalents by year, U.S., 1997-2007



Source: National Vital Statistics System, multiple cause of death dataset, and DEA ARCOS
* 2007 opioid sales figure is preliminary.



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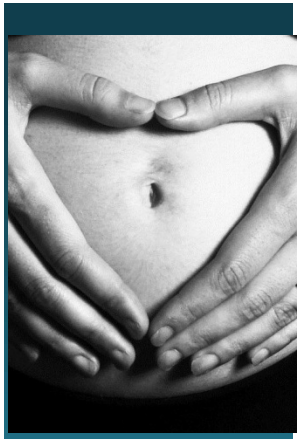
Implications: Today, the consumption of prescription opioids greatly surpasses that of any of our previous drug crises by all measures and accounts, including heroin in the 1960s and 1970s, and crack cocaine in the 1980s and 1990.

Sustained numbers of new and continuing users have contributed to substantial increases in indicators of problems associated with use, especially among young adults:

- Rate of pain reliever dependence for persons aged 12 or older increased from 2002 to 2010 (from 0.4 to 0.6% of the population)
  - number of persons with dependence increased from 936,000 to 1.4 million
  - most of these pain reliever-dependent persons were aged 26 or older (56.6 percent), but about one third (463,000) were aged 18 to 25
- The number of emergency department visits involving nonmedical use of narcotic pain relievers increased from 145,000 in 2004 to 306,000 in 2008.
  - 1 out of 3 visits were from nonmedical use of opioid analgesics in 2005. Of these, oxycodone and hydrocodone account for about 60%.

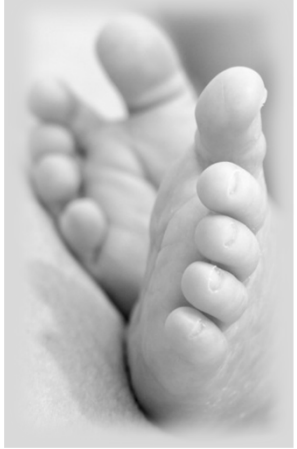
SC Medicaid:Opioids and Women of Childbearing Age (18 – 34)



Opioids and Women of Childbearing Age is Important

- InCY2010 55,894 of all female Medicaid recipients ages 18 to 34 (In CY2010 55,894 of all female Medicaid recipients ages 18 to 34 (N=174,487) had an opiate prescription. This represents 32.0% of women of childbearing age.

- In CY2011 47,691 of all female Medicaid recipients ages 18 to 34 (N=183,283) had an opiate prescription. This represents 26.0% of women of childbearing age.



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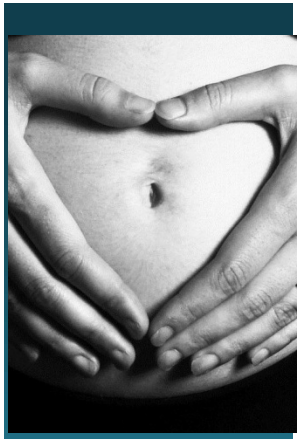
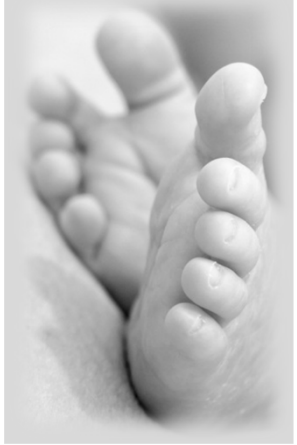


Opioids and Women of Childbearing Age is Important(Continue)

Calendar Year Span	Total (Unique) Females	# of Females on Opioids (overlap)	Percent Overlap for # of Females on Opioids	Total (Unique) Drug Dependent Mothers on Opioids	# of Drug Dependent Mothers on Opioids (overlap)	Percent Overlap for # of Drug Dependent Mothers on Opioids
2008-2009	80141	18670	23.30	1465	547	37.34
2008-2010	108147	10122	9.36	1924	421	21.88
2008-2011	128615	5543	4.31	2254	290	12.87

Note: In the SC Medicaid Program, 4.3% of childbearing age females on had overlapping opioids prescriptions between 2008 - 2011. Approximately 13%, of women with deliveries identified with a positive drug dependence had overlapping opioids prescription between 2008 -2011.



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Opioid Therapy Pattern

	CY2008	CY2009	CY2010	CY2011
Total Medicaid Recipients	47,529	51,282	55,237	47,691
Unique recipients on LAO, chronic SAO, and/or fast-acting therapy	1,672	1,875	2,207	2,293
Total Unique recipients at an individual drug formulation/strength level of LAOs, chronic SAOs, and/or fast-acting therapies*	4,548	5,249	6,102	5,938

Note: *Patients may count more than once if they are on multiple LAO/chronic SAO/fast-acting drugs and/or drug strengths.
***transmucosal lozenge/buccal tablet**

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Recipients on LAO and Chronic SAO

	CY2008 (N = 1672)	CY2009 (N= 1875)	CY2010 (N=2207)	CY2011 (N=2293)
LAO therapy*	40% (673)	32% (609)	26% (570)	21% (479)
Chronic SAO therapy*	69% (1,160)	77% (1,442)	82% (1,816)	87% (1,985)
SAO with concomitant LAO claim(s)	5% (56)	4% (64)	4% (65)	3% (57)
SAO without concomitant LAO claim(s)	95% (1,104)	96% (1,378)	96% (1,751)	97% (1,928)

*Categories are not mutually exclusive; as a result, some values may sum to greater than 100%.

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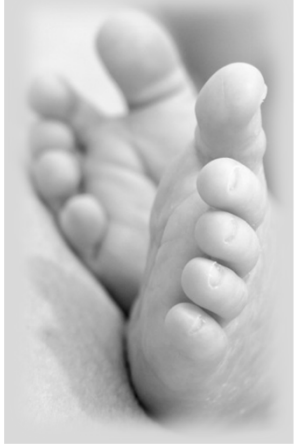
Age Distribution by Therapy

	CY2008 (N=3073)		CY2009 (N=3607)		CY2010 (N=4233)		CY2011 (N=4282)	
	18-34	Mean	18-34	Mean	18-34	Mean	18-34	Mean
Overall	100.0% (3,073)	28	100.0% (3,606)	28	99.9% (4,230)	29	100.0% (4,281)	29
LAO therapy	100.0% (779)	28	100.0% (718)	28	100.0% (654)	28	99.8% (534)	29
Chronic SAO therapy	100.0% (2,290)	29	100.0% (2,888)	28	99.9% (3,576)	29	100.0% (3,747)	29



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Ratio of Chronic SAO Rxs/LAO Rxs

	CY2008 (N=17567)	CY2009 (N=20820)	CY2010 (N=24928)	CY2011 (N=23471)
Ratio of Chronic SAO Rxs to LAO Rxs	**5.2**	**6.8**	**8.3**	**9.9**

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LAO Rxs per 1,000 Patients

	CY2008 (N=2814)	CY2009 (N=2684)	CY2010 (N=2683)	CY2011 (N=2163)
LAO Rxs per 1,000 members per year	59	52	49	45

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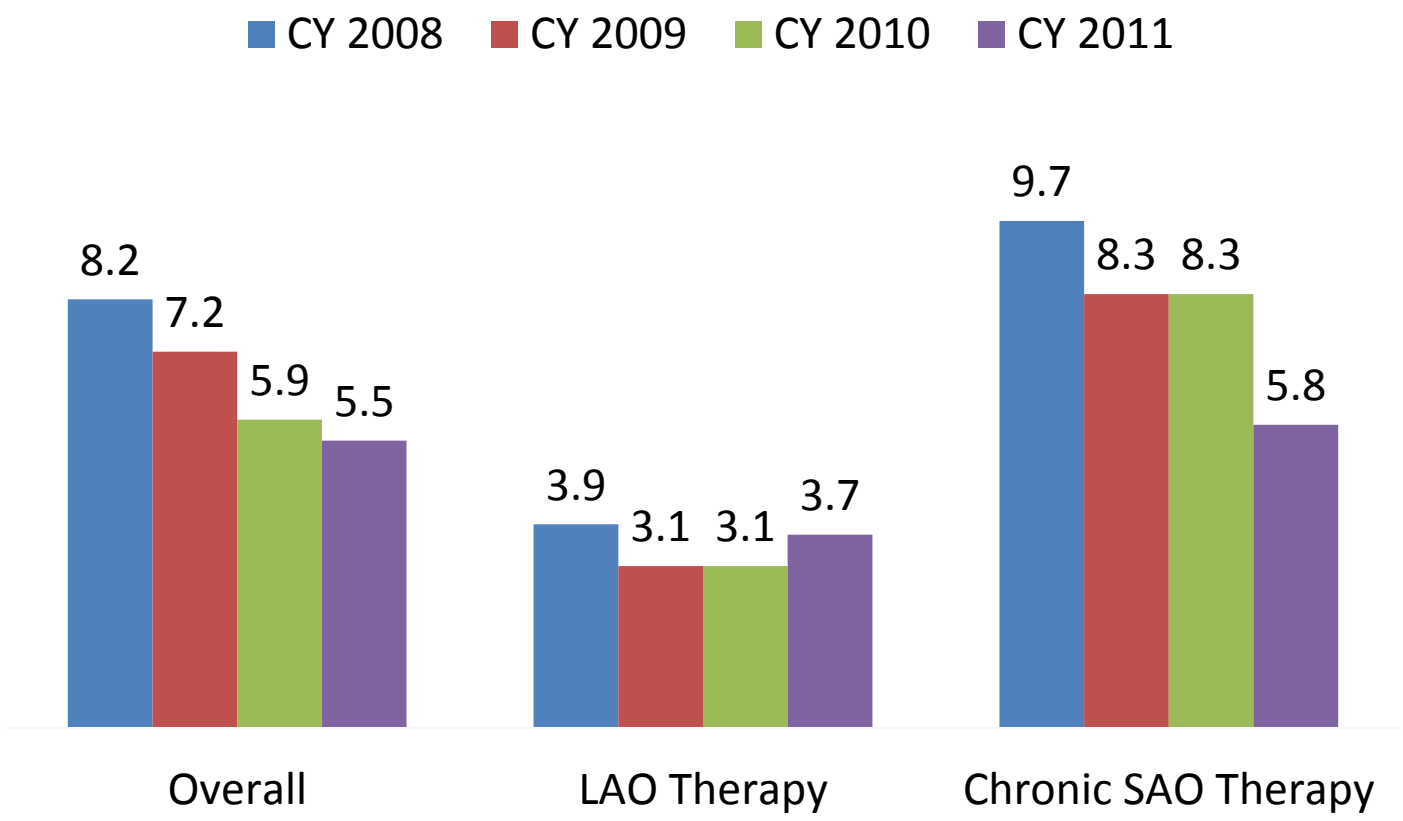
Percent of Population with 4+ Unique Prescribers per Patient



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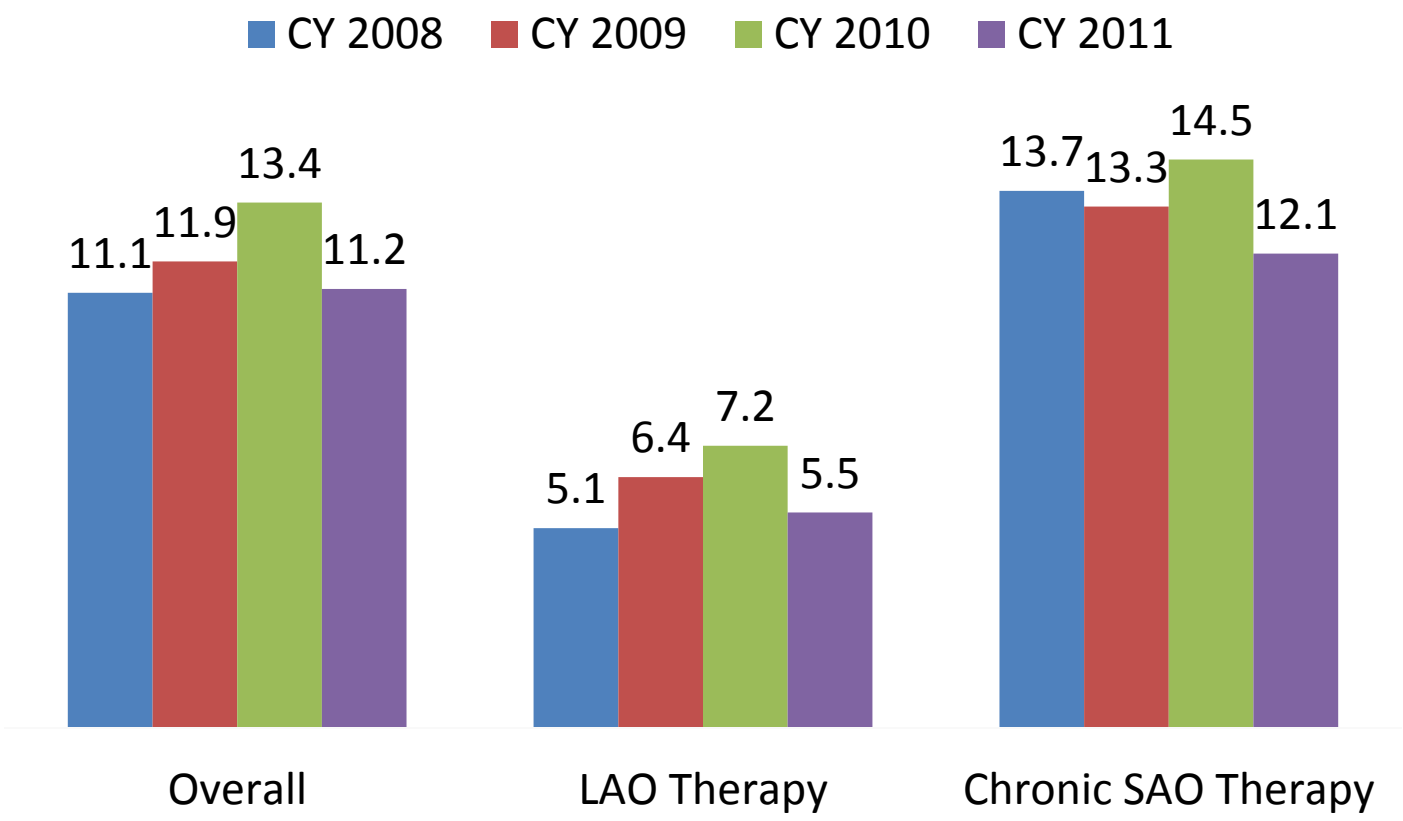
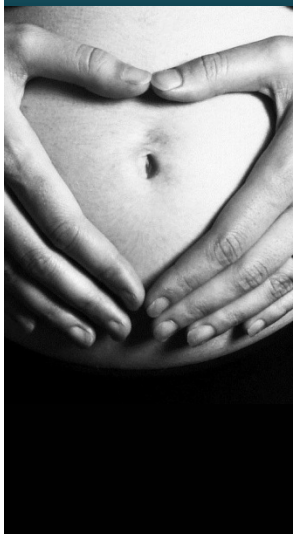
Percent of Population with 4+ Unique Pharmacies per Patient





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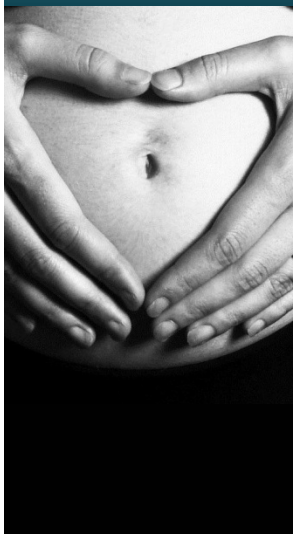
Average Daily Dose



	CY2007 (N=15889)	CY2008 (N=17595)	CY2009 (N=20820)	CY2010 (N=24928)	CY2011 (N=23471)
LAO therapy					
Fentanyl transdermal	20.9 mg	23.6 mg	19.8 mg	18.4 mg	19.2 mg
Methadone	57.0 mg	62.3 mg	54.3 mg	57.7 mg	55.9 mg
Morphine CR/ER/SR	90.1 mg	85.6 mg	84.0 mg	76.7 mg	82.4 mg
Morphine-Naltrexone ER	0 mg	0 mg	40.0 mg	0 mg	0 mg
Oxycodone CR	107.0 mg	111.0 mg	108.0 mg	107.0 mg	97.0 mg
Oxymorphone ER	30.0 mg	33.0 mg	28.2 mg	28.8 mg	35.2 mg
Tapentadol ER	0 mg	0 mg	0 mg	0 mg	291.7 mg
Tramadol ER	217.1 mg	202.7 mg	224.5 mg	260.7 mg	361.5 mg
Chronic SAO therapy					
Codeine-Acetaminophen	137.0 mg	139.1 mg	162.1 mg	173.4 mg	152.2 mg
Hydrocodone-Acetaminophen	34.3 mg	34.2 mg	33.3 mg	32.1 mg	31.3 mg
Hydromorphone	21.7 mg	30.1 mg	23.4 mg	18.4 mg	25.0 mg
Morphine	128.3 mg	72.4 mg	85.3 mg	73.4 mg	81.1 mg
Oxycodone	71.5 mg	74.7 mg	119.7 mg	120.6 mg	75.1 mg
Oxycodone-Acetaminophen	40.5 mg	38.0 mg	37.3 mg	34.3 mg	32.9 mg
Oxycodone-Aspirin	33.8 mg	25.6 mg	32.5 mg	14.6 mg	29.3 mg
Oxycodone-Ibuprofen	0 mg	25.0 mg	0 mg	0 mg	0 mg
Oxymorphone	30.0 mg	39.5 mg	27.5 mg	9.2 mg	0 mg
Tapentadol	0 mg	0 mg	290.7 mg	264.7 mg	310.6 mg
Tramadol	258.4 mg	238.7 mg	228.3 mg	229.8 mg	240.0 mg
Tramadol-Acetaminophen	209.0 mg	204.2 mg	212.6 mg	190.0 mg	186.4 mg
Fast-acting therapy					
Fentanyl oral*	2314.0 mg	3077.1 mg	0 mcg	0 mcg	0 mcg

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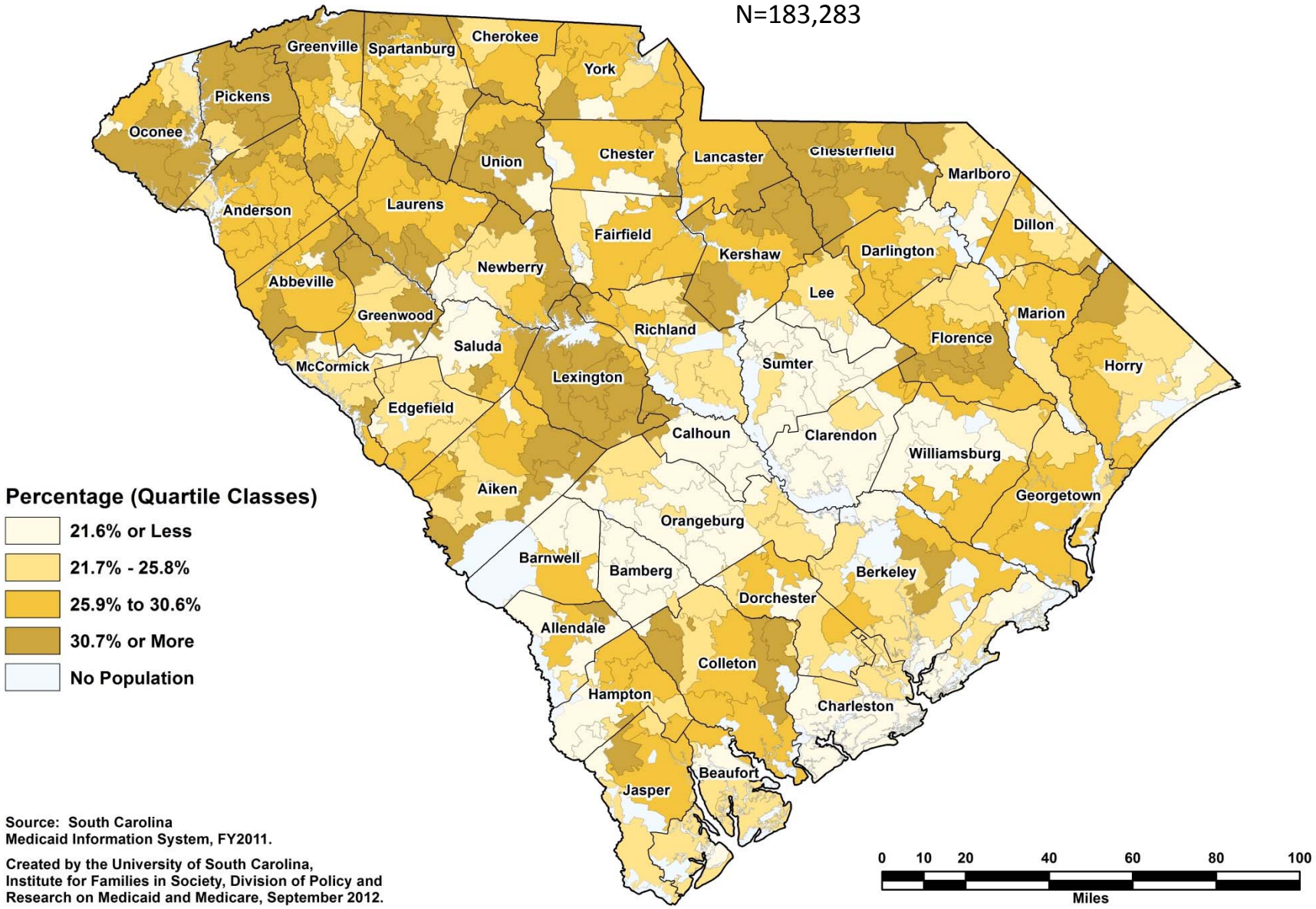
Percentage of Female South Carolina Medicaid Recipients Ages 18 to 34 With an Opiate Prescription by ZCTA, FY2011

N=183,283

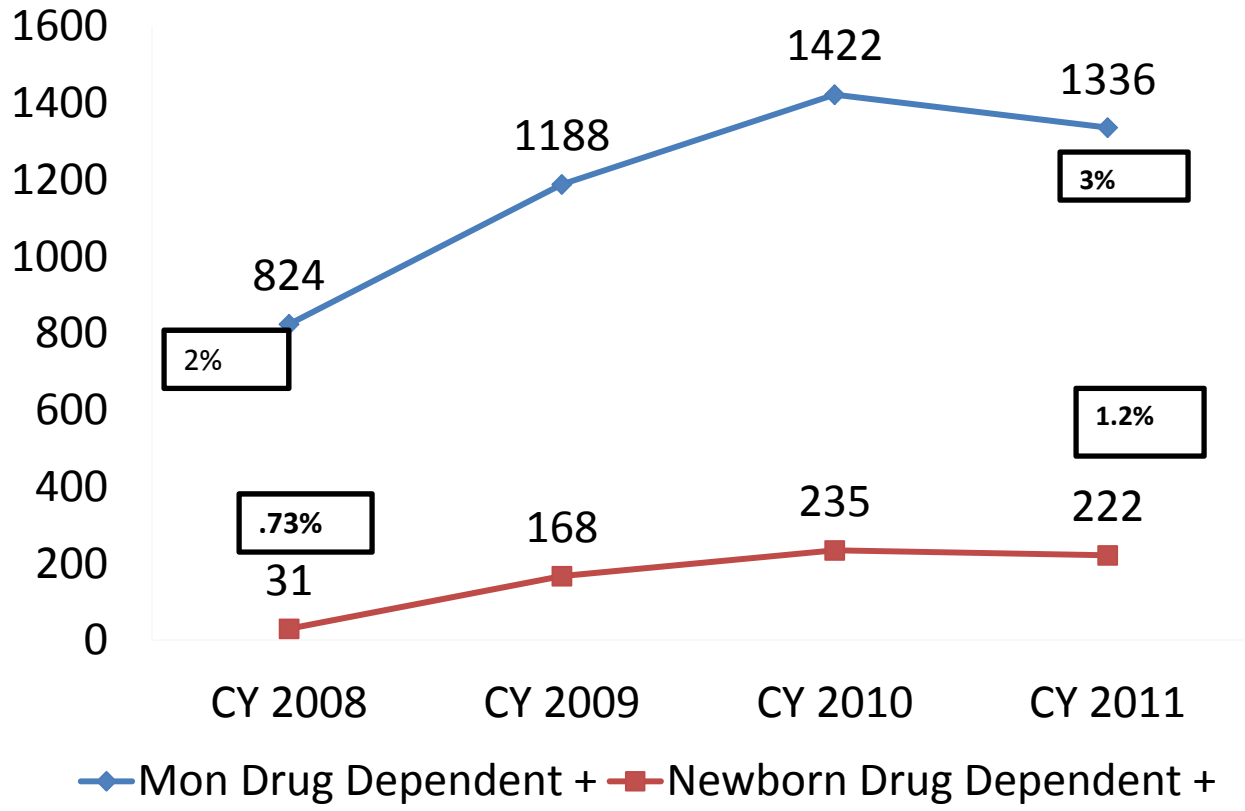


Source: South Carolina Medicaid Information System, FY2011.

Created by the University of South Carolina, Institute for Families in Society, Division of Policy and Research on Medicaid and Medicare, September 2012.

Drug Dependent Women and Newborn Deliveries

Patterns of Drug Dependency Diagnosis: Mom's and Babies



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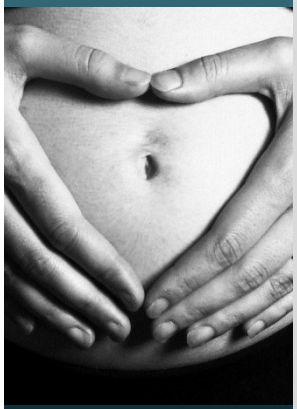

Implications

- Risk is equal for women and greater for women of childbearing age.
- Non-Hispanic whites are at greatest risk
- Risk might increase with dose, number of prescriptions, and number of prescribers.
- Risk to pregnant women increases for both mother and child.
- Further analysis is required with implications for service delivery.

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Questions?

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