Opioid Use Among Female Medicaid Recipients of Reproductive Age

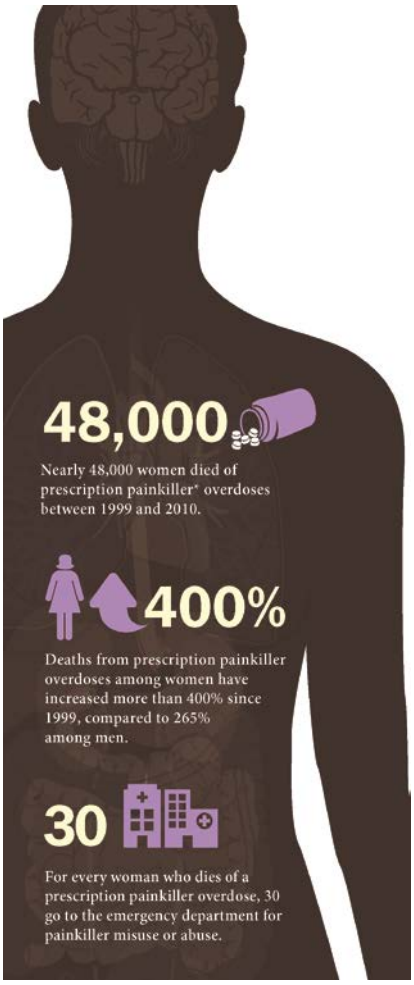

Image source: http://www.cdc.gov/vitalsigns/prescriptionpainkilleroverdoses/

BACKGROUND

Since 1999, the rate of drug overdose deaths from opioid pain relievers increased 400% for women (as compared to only 265% for men).[1] The increase in overdose deaths may be attributable to gender differences in opioid use disorders, as women with opioid use disorders report experiencing more current and past medical problems, which means they are more likely to be prescribed prescription painkillers at higher doses and for longer than men, and have significantly higher cravings for opioids than men.[2]

In South Carolina, a 2012 preliminary study of women of childbearing age (ages 18-34) and opioids revealed that 32.0% of SC female Medicaid recipients in 2010 and 26.0% in 2011 had an opiate prescription.[3] Medical costs for both privately insured and Medicaid populations are higher for patients with diagnoses of opioid abuse-related conditions relative to nonabusers, with elevated costs due in large part to excess prevalence of related comorbidities.[4] Total and adjusted costs are higher for abuse/dependence patients than matched controls with comorbidities occurring six times more frequently in the privately insured and three times as frequently in Medicaid populations.[5] In addition, there are costs associated with poor outcomes for newborns of maternal opioid users, such as hospital charges associated with neonatal abstinence syndrome (NAS) which increased from $39,400 per patient in 2000 to $53,400 in 2009; Medicaid was the primary payer for 77.6% of these charges.[6]

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1 Centers for Disease Control and Prevention. (2013, July 5). Vital signs: Overdoses of prescription opioid pain relievers and other drugs among women – United States, 1999-2010. *Morbidity and Mortality Weekly Report*. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6226a3.htm

2 Back, S. E., Payne, R. L., Wahlquist, A. H., Carter, R. E., Stroud, Z., Haynes, L., Hillhouse, M., Brady, K. T., & Ling, W. (2011). Comparative profiles of men and women with opioid dependence: Results from a national multisite effectiveness trial. *American Journal of Drug and Alcohol Abuse, 37*(5), 313-323. doi: 10.3109/00952990.2011.596982.; CDC, 2013

3 Lopez-DeFede, A., Harris, T., Blanco-Silva, K., & Walker, D. (2012, Sept 12). Women of childbearing age and opioids: Preliminary data SC Medicaid Program. Retrieved from https://scdhhs.gov/sites/default/files/BOI%20Opiates_PreNatal%20Sept%2012_2012.pdf

4 Ghate, S. R., Haroutiunian, S., Winslow, R., & McAdam-Marx, C. (2010). Cost and comorbidities associated with opioid abuse in managed care and Medicaid patients in the United States: A comparison of two recently published studies. *Journal of Pain and Palliative Care Pharmacotherapy, 24*(3): 251-258; White, A. G., Birnbaum, H. G., Schiller, M., Waldman, T., Cleveland, J. M., & Roland, C. L. (2011). Economic impact of opioid abuse, dependence, and misuse. *American Journal of Pharmacy Benefits, 3*(4), e59-e70. Retrieved from http://www.ajmc.com/publications/ajpb/2011/AJPB_MayJun2011/Economic-Impact-of-Opioid-Abuse-Dependence-and-Misuse

5 McAdam-Marx, C., Roland, C., Cleveland, J., Oderda, G. (2010). Costs of opioid abuse and misuse determined from a Medicaid database. *Journal of Pain and Palliative Care Pharmacotherapy, 24*(1), 5-18.; White et al., 2011

6 Patrick, S. W., Schumacher, R. E., Benneyworth, B. D., Krans, E. E., McAllister, J. M., Davis, M. M. (2012). Neonatal abstinence syndrome and associated health care expenditures. *The Journal of the American Medical Association, 307*(18), 1934-1940.

UPDATED MEDICAID DATA FINDINGS

The University of South Carolina, Institute for Families in Society, Division of Medicaid Policy Research conducted a retrospective study of women, ages 18-44, who were Medicaid managed care and fee-for-service recipients, within the state of South Carolina between fiscal years 2012 and 2013 (July 1st, 2011–June 30th, 2013).

The Opioid Therapy Medication Use Evaluation (MUE) Software Tool Version 5.0, created by Janssen Pharmaceuticals, was used to import (based on its list of national drug codes) and analyze retrospective pharmacy claims data which assisted in defining utilization patterns of opioid therapy with validation (see Table 1).

Prescribing Patterns

Table 1: Total Number of Pharmacy Claims

	Total Pharmacy Claims	Number of Unique Women with Pharmacy Claims
FY2012	1,781,669	154,075
FY2013	1,790,027	151,066

Note: Outliers for pharmacy claims of having more than 50 pills per day were excluded.

The Opioid MUE software identified pharmacy claims, based on its list of national drug codes, and broke them down into long-acting opioids (LAO), chronic short-acting opioids (SAO), and fast-acting therapy opioid claims (see Table 2).

Table 2: Number of LAO, Chronic SAO, and Fast-acting Therapy Pharmacy Claims among Women of Reproductive Age

	Total LAO, Chronic SAO, Fast-acting Therapy Pharmacy Claims	Number of Unique Women on LAO, Chronic SAO, Fast-acting Therapy
FY2012	61,235	5,589
FY2013	62,454	5,784

The average age for the overall opioid study was 34 for both fiscal years, where the majority of opioid patients were 35-44 years of age compared to 18-34, 52% and 51.9% for FY12 and FY13 respectively. The two most commonly filled LAO therapy prescriptions for both FY12 and FY13 were Morphine CR/ER/SR (43%; 46% respectively) and Fentanyl transdermal (24%; 22% respectively), while the two most commonly filled chronic SAO therapy prescriptions for both fiscal years were Hydrocodone-Acetaminophen

(54%; 55% respectively) and Oxycodone-Acetaminophen (19%; 18% respectively). Lastly, the most common fast-acting therapy prescription is Buprenorphine sublingual (98%; 99% respectively) compared to the fentanyl oral (transmucosal lozenge/buccal tablet).[7]

Among our study population, the majority of patients had chronic SAO (60 day use) therapy claims, with 82% in both fiscal years, compared to LAO therapy claims, shown in Table 3.

Table 3: Women of Reproductive Age on LAO and Chronic SAO

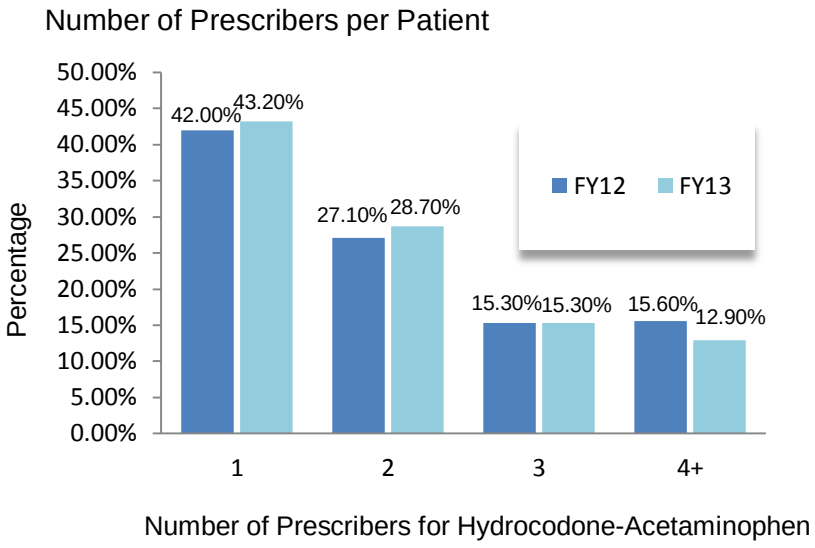
	FY12	FY13
LAO therapy*	1,488 (27%)	1,540 (27%)
Chronic SAO therapy*	4,594 (82%)	4,718 (82%)
SAO with LAO claim(s)	328 (7%)	333 (7%)
SAO without LAO claim(s)	4,266 (93%)	4,385 (93%)

* Not mutually exclusive

Percentage of Patients with Multiple Prescribers

While the majority of the population went to one prescriber for their LAO, chronic SAO, and fast-acting opioid prescriptions overall, hydrocodone-acetaminophen prescriptions had a much different pattern.

The hydrocodone-acetaminophen prescriber percentages for one prescriber were lower than the overall opioid prescriber percentages while the percentages for two or more prescribers were higher than the overall percentages.

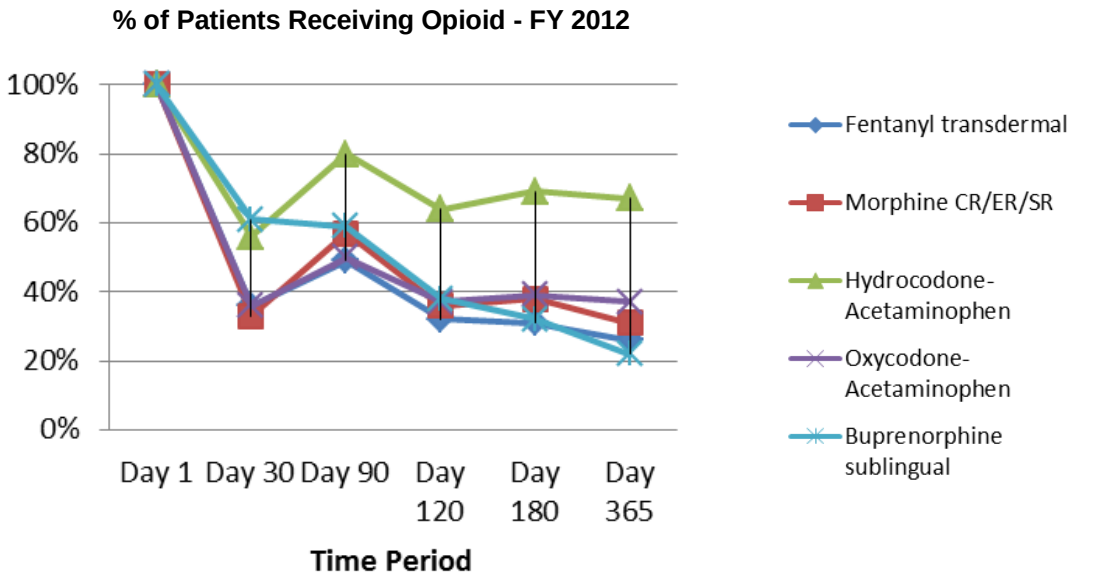


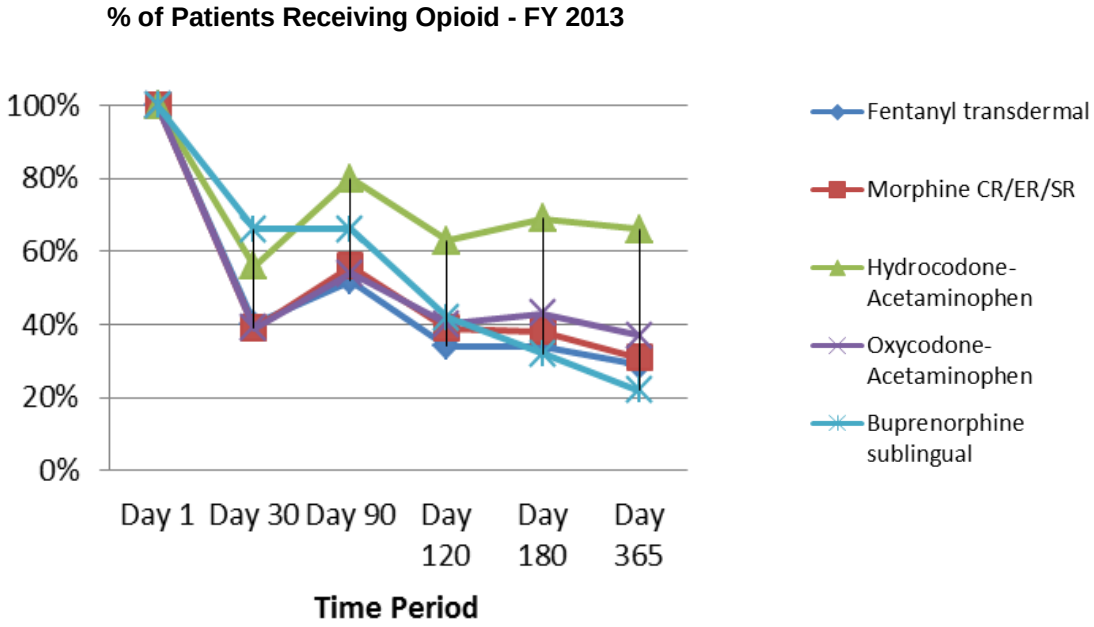
[7] This buprenorphine sublingual formulation is likely the sublingual form of Suboxone/Subutex, which is being used for the treatment of opioid addition rather than pain. Buprenorphine is a partial opioid agonist that is used for pain in some formulations (Butrans patches), but it is also used to treat opioid addition (in the Subutex formulation).

Patterns of Use

For the five most commonly prescribed drugs, at least a third of patients were being prescribed for six months continuously in both fiscal years. For hydrocodone-acetaminophen, the most commonly prescribed opioid, the majority of users (67%) were being prescribed continuously for a year.

Opioid Dosing Trend





IMPLICATIONS

- The majority of female Medicaid patients of reproductive age were prescribed chronic SAO therapies. Anywhere between 4% and 26% of patients receiving chronic opioid therapy have an opioid use disorder, and among these patients, one in ten misuse opioids.[8]
- Over 6,000 patients were prescribed hydrocodone-acetaminophen, and these women were not only more likely to visit more than one prescriber to receive their prescription, but were also most likely to be continuous users for a year.
- The potential maternal and child health risks associated with this misuse are significant, especially since approximately 12% of female patients ages 18-44 delivered a baby in both of these fiscal years and women of advanced maternal age, who are at greater risk of adverse pregnancy outcomes, were more likely to be prescribed.[9]
- These data suggest the need for changes in service delivery that promote early identification of opioid-dependent women of reproductive age, which is key to improving both maternal and infant outcomes, as well as reducing overall cost to the state Medicaid agency resulting from potentially high ER utilization, neonatal intensive care unit costs, prescription monitoring, medical complications, and treatment.

State Response

In May of 2013, the Office of the Inspector General released a report which detailed the scope of the problem in South Carolina (with SC ranking 23rd highest per capita in overdose deaths) and described how South Carolina lacked a statewide prescription drug abuse strategy. The report led to a comprehensive strategy being launched in March, 2014 with Governor Haley signing an executive order to establish The Governor's Prescription Drug Abuse Prevention Council. The Council is made of representatives from state agencies, as well as community representatives such as coroners, pain management and addiction treatment specialists, and the SC Hospital Association. Representatives from the SC Department of Health & Human Services and University of South Carolina, Institute for Families in Society, Division of Medicaid Policy Research are serving on the Council to ensure that state Medicaid policy supports the reduction of opioid misuse and abuse among Medicaid recipients, especially women of reproductive age.

As of June, 2014, SC Senate Bill 840 was passed, which included these three policies: allowing delegation of access to the Prescription Drug Monitoring Program, a 24 hour pharmacy reporting requirement, and a CME requirement for controlled substances prescribing. The Council will release an annual report October, 2014, which details the importance of not only limiting the supply of opioids, but also providing needed treatment options, including medication-assisted treatment and access points for treatment across the state.

[8] http://www.supportprop.org/educational/PROP_OpioidPrescribing.pdf
[9] Percentage derived from data pulled from Truven Health Advantages Suite V. 5.1 with claims processed through July, 2014. Percentage represents female patients ages 18-44 with a delivery/total number of female patients ages 18-44.