Street Prices of Prescription Opioids Diverted to the Illicit Market

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Introduction

•Prescription opioid abuse and diversion have become major public health problems in recent years, contributing to a wide range of health, social and economic consequences among affected populations.

•Within this context, there is an ongoing need to identify and examine new, proactive indicators to better characterize the prescription opioid abuse and diversion problem.

•In this regard, we implemented a national street price surveillance program with law enforcement investigators.

•Monitoring trends in street prices for prescription opioids may provide an indicator of drug availability, demand, and abuse potential within targeted geographic areas.

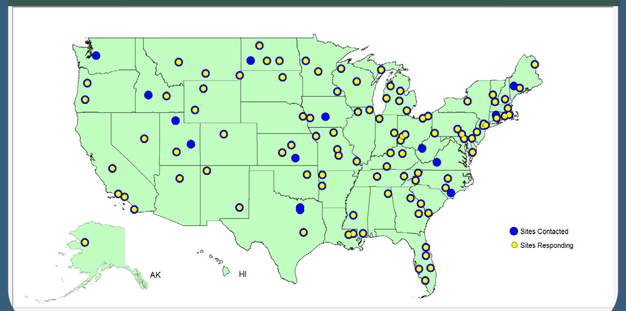
Methods

Aim: To examine street prices of diverted prescription opioids using surveillance data from a nationwide network of law enforcement officers, collected as part of the **RADARS** ® (**R**esearched **A**buse, **D**iversion and **A**ddiction-**R**elated **S**urveillance) System.

Procedures: On a quarterly basis, Street Price questionnaires are sent to approximately 125 drug diversion investigators, requesting information on the street values of prescription opioids diverted in their jurisdictions. Targeted prescription opioids include buprenorphine, fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone, oxymorphone, tramadol, and tapentadol. The response rate was 87% in 4Q2011.

Analyses: Street price data were obtained from 687 questionnaires collected during 7 quarters in 2010 and 2011. We computed median prices per milligram for the targeted prescription opioids in order to make standardized price comparisons across drug classes. Trends in price data over time were also examined.

Sites Reporting in 4Q 2011 (N=104)

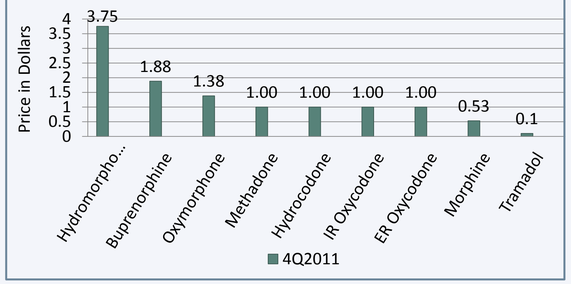


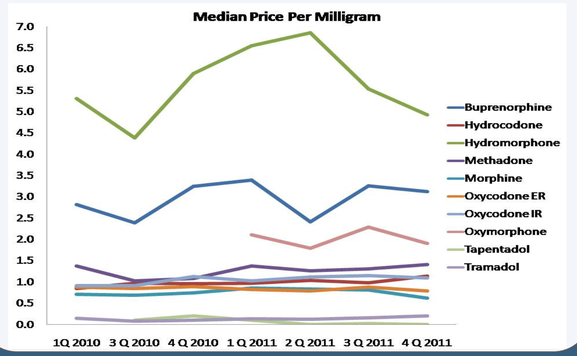
Results

Street Price Reports in 4Q2011

Hydrocodone	N=95
ER Oxycodone	N=77
IR Oxycodone	N=45
Morphine	N=41
Buprenorphine	N=40
Methadone	N=38
Tramadol	N=23
Oxymorphone	N=22
Hydromorphone	N=21
Tapentadol	N= 0

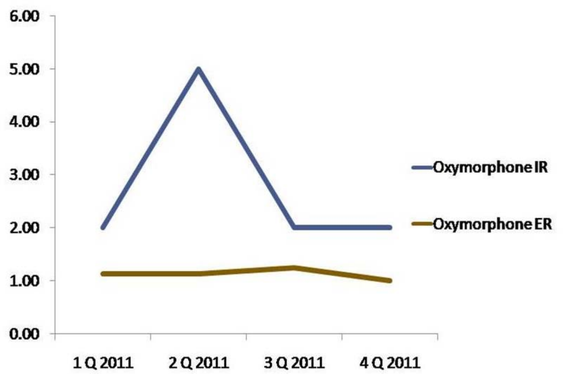
Median Price Per Milligram: Opioids in Tablet Form



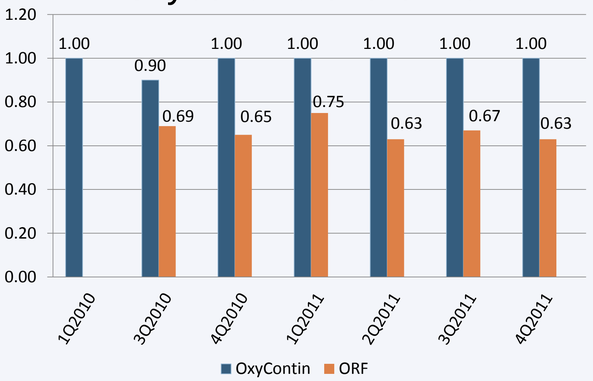


Results

Oxymorphone: Median Price Per Milligram



Median Price Per Milligram: OxyContin® and ORF®



Discussion

•Our analyses yielded substantial differences in street price by opioid class. Higher street values appear to reflect greater desirability/demand among abuser populations, as well as issues of supply and availability.

• The lower prescribing of buprenorphine, hydromorphone, and oxymorphone products, relative to hydrocodone and oxycodone, suggest reduced availability for diversion to the illicit market, which may impact the street value of these products. Street value also appears to be impacted by demand for higher potency opioids.

• Within class, immediate release opioids may carry higher street values than the extended release counterparts. Ease of abuse may be one factor in this regard.

•The newly reformulated OxyContin®, a tamper-deterrent formulation, carries a lower street value than its predecessor.

Conclusion

•Observations across 7 quarters indicate that price data are generally consistent, and suggest that reliable street price estimates can be achieved using a nationwide network of law enforcement officers.

•SPQ appears sensitive enough to detect new drugs or new formulations in a timely fashion, and to discern differences in price per milligram at the drug or brand level.

•Using longitudinal data, it is possible to monitor price changes in response to the introduction of tamper deterrent formulations. This may provide useful evidence in evaluating the success of TDFs in reducing abuse.

Acknowledgements/Disclosures

This research was supported by a contract from Denver Health & Hospital Authority. The RADARS® System is a public, non-profit organization providing post-marketing surveillance of prescription medications. The authors are Scientific Advisory Board members for the RADARS® System or employees of Denver Health and Hospital Authority. The authors have no direct financial relationships or non-financial relationships with pharmaceutical companies outside of their roles in the RADARS® System.

The authors gratefully acknowledge Dr. James A. Inciardi.