Abstract:

**Background:** The diversion of prescription opioids to street markets is a major contributor to illicit opioid use in the United States.

**Research Question:** We examined whether diversion of extended release oxymorphone (Opana® ER) declined following the introduction of a crush resistant formulation (CRF) in February 2012.

**Methods:** Data from 156 law enforcement agencies in the RADARS® System Drug Diversion Program who submitted data every quarter between 2011Q1 and 2013Q2 were used. The number of diversion cases by agency and quarter in the pre-CRF period (2011Q1 through 2011Q4) was compared to the number of cases in the post-CRF period (2012Q3 through 2013Q2) using zero-inflated Poisson Regression adjusting for within agency correlation.

**Results:** There was a 63% (95% CI: 51%-72%, p<0.001) decline in the average number of Opana ER diversion cases between the pre- and post-CRF periods. Findings were similarly adjusted for population covered by agencies. In the pre-CRF period, most cases were reported by agencies in Kentucky (116, 42%) and Tennessee (64, 23%). Tennessee accounted for 36 cases (32%) after reformulation, twice as many as North Carolina, the next highest state.

**Conclusion:** Our data suggest that the Opana ER reformulation was followed by decreasing street sales of the drug nationally, but certain areas of abuse persist.